ORDS Research Reference Center

HEALTH INSURANCE STUDIES: CONTRACT RESEARCH SERIES

Report No. 3

PROSPECTIVE INCENTIVE PAYMENT EXPERIMENT

PHASE 1: APPENDIXES TO FINAL REPORT

INFORMATION RESOURCE CENTER, HCFA

U.S. Department of Health, Education, and Welfare
Social Security Administration
Office of Research and Statistics
HEW Publication No. (SSA) 77-11722

REPORTS
RA
971
.3
H25
no.3
Appendixes

RA971.3
.H25
no. 3
Appendixes to final report

PROSPECTIVE INCENTIVE PAYMENT EXPERIMENT

PHASE 1: APPENDIXES TO FINAL REPORT

This report was prepared under a contract between the Social Security Administration, HEW and the California Hospital Association. The views and opinions expressed in the report are the contractor's and no endorsement by the Social Security Administration or HEW is intended or should be inferred. The project officer for this contract was Alfonso Esposito, a staff member within the Division of Health Insurance Statistics, Office of Research and Statistics.

Under the HEW reorganization announced March 8, 1977, the Division of Health Insurance Studies has been transferred to the Health Care Financing Administration.

Contract Number 600-75-0165

COMMITTEES

Table 1	Prospective Incentive Payment Project Advisory Committee (PAC)
Table 2	Committee on Research and Development (CRD)
Table 3	Ad Hoc Committee on Financial Requirements & Rates

Table 1

PROSPECTIVE INCENTIVE PAYMENT PROJECT
ADVISORY COMMITTEE

Staff: Henry W. Zaretsky, Ph.D.

Chairman: Gordon R. Cumming
Principal Investigator
Prospective Incentive Payment
Experiment

Joe Cuccia, Chief
Health Operations Branch
Department of Benefit Payments
Sacramento, California

Brian Dobrow
Executive Director
Golden Empire Comprehensive
Health Council
Sacramento, California

Al Esposito
Program Experimentation Branch
Office of Research and Statistics
Social Security Administration
Department of Health, Education
& Welfare
Baltimore, Maryland

Jay Gould, Chief
Medi-Cal Benefits Section
State Department of Health
Sacramento, California

Eric D. McKenzie
Medicare Coordinator
Blue Shield of California
San Francisco, California

Walter K. Palmer
Vice President-Finance
Kaiser Foundation Health Plan
Oakland, California

Harold L. Ray
CHA Committee on Research
& Development
Director of Finance
Mercy Hospitals of Sacramento
Carmichael, California

Louis J. Rivera
Director of Hospital
Reimbursement
Hospital Service of California
Oakland, California

Fred Rothenberg, Manager
Health Services Reimbursement
Department
Blue Cross of Southern
California
Los Angeles, California

Harold K. Strunk, Dr. P.H.
Director
United Foundations for
Medical Care
San Francisco, California

Douglas K. Swinnerton
Second Vice President-
Group Benefits
Pacific Mutual Life Insurance
Company
Newport Beach, California

Ralph Thomas
Director
Peer Review Division
California Medical Association
San Francisco, California

Table 2

COMMITTEE ON RESEARCH & DEVELOPMENT

Staff: Henry W. Zaretsky, Ph.D.

Chairman: William H. Rowe
Administrator
Sierra Hospital
Fresno, California

W. Kevin Hegarty, President
Huntington Memorial Hospital
Pasadena, California

E. G. Hertfelder
Administrator
Mercy Hospital and Medical Center
San Diego, California

Joel Kovner, Dr. P.H.
Director of Medical Economics
Kaiser Foundation Health Plan
Los Angeles, California

Eleanor Langpaap, Administrator
Eskaton American River Healthcare Center
Carmichael, California

Robert L. Montgomery
Executive Vice President
Alta Bates Hospital
Berkeley, California

David E. Olsson, Secretary to the Board of Trustees
San Jose Hospital and Health Center
San Jose, California

Harold L. Ray, Director of Finance
Mercy Hospitals of Sacramento
Carmichael, California

W. Harlyn Robinson
Administrator
Modesto City Hospital
Modesto, California

Martin B. Ross, Dr. P.H.
Lecturer
Program in Hospital Administration
University of California
Los Angeles, California

Larry Russell, Controller
Hyatt Medical Management Services, Inc.
Encino, California

Leslie R. Smith
Executive Director
San Pedro & Peninsula Hospital
San Pedro, California

David B. Starkweather, Dr. P.H.
Director
Graduate Program in Hospital Administration
University of California
Berkeley, California

George A. Thompson, Controller
University of California Hospital & Medical Center
San Francisco, California

William J. Warhurst, President
California Health Data Corporation
Sacramento, California

Isadore Weinstein, Administrator
Rio Hondo Memorial Hospital
Downey, California

Carl Weissburg, Executive Director
United Hospital Association
Los Angeles, California

Robert W. White
Administrator
Orange County Medical Center
Orange, California

Table 3

AD HOC COMMITTEE ON FINANCIAL REQUIREMENTS AND RATES

Staff: Henry W. Zaretsky, Ph.D.

Charles Baker
Director of Administrative Services
San Jose Hospital and Health Center
San Jose, California

Charles K. Bradford
Arthur Anderson & Company
Los Angeles, California

John Cochran
Assistant Director, Finance
Cedars-Sinai Medical Center
Los Angeles, California

Peter Foulke
Controller
O'Connor Hospital
San Jose, California

Yoshi Honkawa
Director of Finance
Cedars-Sinai Medical Center
Los Angeles, California

Paul Jerdin
Coopers & Lybrand
Los Angeles, California

Richard K. Long
American Medicorp International, Inc.
Berverly Hills, California

Walter K. Palmer
Vice President-Finance
Kaiser Foundation Health Plan
Oakland, California

Larry Russell, Controller
Hyatt Medical Management Services, Inc.
Encino, California

Robert Samsel
Vice President of Systems Operation
American Medical International, Inc.
Beverly Hills, California

George A. Thompson, Controller
University of California Hospital & Medical Center
San Francisco, California

EXCESS CAPACITY

Table 1 Effects of Increasing Occupancy (By Closing Hospitals and Eliminating Beds) - 1972

Table 1

EFFECTS OF INCREASING OCCUPANCY
(BY CLOSING HOSPITALS AND ELIMINATING BEDS)
1972

HSA #	Service Area	(Pop.) (Bed Size of Hosps. Eliminated)		#Hosp.	#Beds	Patient Days	Occupancy	Total Costs (000)	Percent Savings
REGION - NORCOA									
101	Crescent City	(189,600)	Step 1	1	73	12,702	48%	1,545	
			2	Not required					
			3	1	44	12,702	80%	1,208	22%
103	Hoopa	(5,400)	Step 1	1	16	625	36%	87	
			2	Not required					
			3	1	3	625	65%	70	20%
105	Eureka	(71,100)	Step 1	5	371	64,017	47%	10,577	
		(all <77 closed)	2	3	246	64,017	71%	8,208	22%
			3	3	206	64,017	80%	7,889	25%
107	Fortuna	(19,300)	Step 1	1	47	7,897	46%	1,165	
			2	Not required					
			3	1	33	7,897	65%	1,082	7%
109	Garberville	(7,500)	Step 1	1	18	2,675	41%	372	
			2	Not required					
			3	1	11	2,675	65%	328	12%
111	Fort Bragg	(16,200)	Step 1	1	54	6,846	35%	940	
			2	Not required					
			3	1	29	6,846	65%	829	12%
113	Ukiah	(33,300)	Step 1	4	168	31,371	51%	4,568	
		(all <40 eliminated)	2	3	130	31,371	66%	3,794	17%
			3	3	123	31,371	70%	3,727	18%
115	Lakeport	(21,500)	Step 1	2	60	12,915	59%	1,523	
			2	Not required					
			3	2	54	12,915	65%	1,520	--

Table 1 (cont.)

HSA #	Service Area	(Pop.) (Bed Size of Hosps. Eliminated)		#Hosp.	#Beds	Patient Days	Occupancy	Total Costs (000)	Percent Savings
REGION - SUPERIOR CALIFORNIA									
201	Alturas	(7,900) (all <30 eliminated)	Step 1	2	54	6,292	32%	741	
			2	1	32	6,292	54%	466	37%
			3	1	27	6,292	65%	428	42%
203	Yreka	(16,800)	Step 1	1	80	14,778	51%	1,759	
			2	Not required					
			3	1	62	14,778	65%	1,656	6%
205	Mt. Shasta	(16,800)	Step 1	1	25	6,770	74%	700	--
			2	Not required					
			3	Not required					
207	Weaverville	(7,900)	Step 1	1	29	4,147	39%	643	
			2	Not required					
			3	1	17	4,147	65%	602	6%
209	Redding	(81,300) (all <100 eliminated)	Step 1	4	363	75,516	57%	8,996	
			2	2	296	75,516	69%	8,025	11%
			3	2	259	75,516	80%	7,629	15%
211	Red Bluff	(31,000) (all <75 eliminated)	Step 1	3	122	19,784	44%	2,374	
			2	1	75	19,784	72%	1,897	20%
			3	Not required					
213	Susanville	(16,900)	Step 1	1	28	6,161	60%	581	
			2	Not required					
			3	1	26	6,161	65%	563	3%
215	Quincy	(9,700) (14 bed hospital)	Step 1	3	60	9,903	45%	1,242	
			2	2	46	9,903	59%	1,142	8%
			3	2	42	9,903	65%	1,099	12%
217	Portola	(3,000)	Step 1	1	24	4,208	48%	576	
			2	Not required					
			3	1	18	4,208	65%	481	7%
219	Chico	(67,000)	Step 1	3	291	77,383	73%	9,193	
			2	Not required					
			3	3	283	77,383	75%	9,117	1%

Table 1 (cont.)

HSA #	Service Area	(Pop.) (Bed Size of Hosps. Eliminated)		#Hosp.	#Beds	Patient Days	Occupancy	Total Costs (000)	Percent Savings
REGION - SUPERIOR CALIFORNIA (cont.)									
221	Oroville	(39,900) (all <75 eliminated)	Step 1	3	225	44,950	55%	4,020	
			2	2	170	44,950	70%	3,541	12%
			3	Not required					
223	Willows	(17,700)	Step 1	1	42	7,145	47%	674	
			2	Not required					
			3	1	30	7,145	65%	590	12%
225	Colusa	(12,300)	Step 1	1	60	11,835	54%	1,526	
			2	Not required					
			3	1	50	11,835	65%	1,475	3%
227	Marysville	(85,000) (all <47 eliminated)	Step 1	4	273	59,795	60%	9,209	
			2	3	227	59,795	72%	8,335	9%
			3	3	205	59,795	75%	8,234	11%
REGION - GOLDEN EMPIRE									
301	Nevada City	(27,000) (all <25 eliminated)	Step 1	3	136	24,172	49%	3,147	
			2	2	115	24,172	58%	2,863	9%
			3	2	95	24,172	70%	2,710	14%
303	Truckee	(4,200) (all <25 eliminated)	Step 1	2	52	7,149	38%	1,968	
			2	1	42	7,149	47%	1,872	5%
			3	1	30	7,149	65%	1,775	10%
305	Placerville	(48,900) (all <35 eliminated)	Step 1	3	145	23,971	45%	4,052	
			2	2	111	23,971	59%	3,741	8%
			3	2	94	23,971	70%	3,580	12%
307	Auburn	(37,500) (all <50 eliminated)	Step 1	3	168	31,334	51%	5,729	
			2	2	120	31,334	70%	4,742	17%
			3	Not required					
309	Roseville	(315,600) (all <50 eliminated)	Step 1	5	840	219,558	72%	31,737	
			2	4	806	219,558	75%	31,304	1%
			3	4	707	219,558	85%	30,195	5%

Table 1 (cont.)

HSA #	Service Area	(Pop.) (Bed Size of Hosps. Eliminated)		#Hosp.	#Beds	Patient Days	Occupancy	Total Costs (000)	Percent Savings
REGION - GOLDEN EMPIRE (cont.)									
311	Sacramento	(410,700)	Step 1	6	1,536	361,201	64%	64,160	
		(all <150 eliminated)	2	4	1,360	361,201	73%	61,819	4%
			3	4	1,164	361,201	85%	59,642	7%
313	Woodland	(66,200)	Step 1	3	236	39,798	46%	6,214	
		(all <50 eliminated)	2	2	188	39,798	58%	5,590	10%
			3	2	145	39,798	75%	5,191	16%
REGION - BAY AREA									
401	Santa Rosa	(144,200)	Step 1	6	591	143,147	66%	19,790	
		(all <50 eliminated)	2	4	498	143,147	79%	18,318	7%
			3	4	490	143,147	80%	18,248	8%
403	Petaluma	(73,400)	Step 1	3	173	37,685	60%	4,313	
		(all <50 eliminated)	2	2	140	37,685	74%	3,825	11%
			3	2	138	37,685	75%	3,804	12%
405	San Rafael	(204,100)	Step 1	5	507	110,156	60%	17,277	
		(all <100 eliminated)	2	2	360	110,156	84%	15,351	11%
			3	2	355	110,156	85%	15,299	11%
407	Napa	(83,800)	Step 1	2	219	48,966	61%	8,237	
			2 Not required						
			3	2	167	48,966	80%	7,786	5%
409	Vallejo	(166,500)	Step 1	6	554	117,328	58%	16,394	
		(all <80 eliminated)	2	3	411	117,328	78%	14,235	13%
			3	3	402	117,328	80%	14,122	14%
411	Concord	(386,700)	Step 1	7	942	233,511	68%	46,722	
		(all <100 eliminated)	2	4	763	233,511	84%	42,987	8%
			3	4	753	233,511	85%	42,868	8%
413	Richmond	(190,500)	Step 1	4	549	111,727	56%	18,452	
		(all <100 eliminated)	2	2	383	111,727	80%	15,692	15%
			3 Not required						

Table 1 (cont.)

HSA #	Service Area	(Pop.) (Bed Size of Hosps. Eliminated)		#Hosp.	#Beds	Patient Days	Occupancy	Total Cost (000)	Percent Savings
REGION - BAY AREA (cont.)									
415	Berkeley	(129,000)	Step 1	3	380	104,587	75%	24,332	
			2	Not required					
			3	3	358	104,587	80%	24,093	1%
417	Oakland	(430,500)	Step 1	9	1,801	440,374	67%	69,690	
		(all <150 eliminated)	2	5	1,437	440,374	84%	60,564	13%
			3	5	1,419	440,374	85%	60,543	13%
419	Livermore	(87,700)	Step 1	1	110	23,546	59%	3,929	
			2	Not required					
			3	1	81	23,546	80%	3,614	8%
421	Hayward	(429,200)	Step 1	9	1,362	301,613	61%	44,870	
		(all <125 eliminated)	2	6	1,045	301,613	79%	37,455	17%
			3	6	972	301,613	85%	36,482	19%
423	San Francisco	(674,800)	Step 1	19	5,059	1,049,330	62%	225,409	
		(all <250 eliminated)	2	10	3,867	1,049,330	81%	201,306	11%
			3	10	3,382	1,049,330	85%	199,505	11%
425	Daly City	(161,500)	Step 1	2	293	76,257	71%	11,679	
		(all <50 eliminated)	2	1	254	76,257	82%	10,963	6%
			3	Not required					
427	San Mateo	(197,200)	Step 1	3	841	201,981	66%	35,475	
		(all <200 eliminated)	2	1	687	201,981	81%	29,389	17%
			3	Not required					
428	Redwood City	(198,100)	Step 1	2	597	117,203	54%	17,807	
		(all <300 eliminated)	2	1	390	117,203	82%	14,629	18%
			3	Not required					
429	Palo Alto	(400,700)	Step 1	3	1,332	366,819	75%	55,944	
			2	Not required					
			3	3	1,182	366,819	85%	54,207	3%

Table 1 (cont.)

HSA #	Service Area	(Pop.) (Bed Size of Hosps. Eliminated)		#Hosp.	#Beds	Patient Days	Occupancy	Total Costs (000)	Percent Savings
REGION - BAY AREA (cont.)									
431	San Jose	(695,600) (all <201 eliminated)	Step 1	9	2,017	412,081	56%	77,433	
			2	4	1,340	412,081	84%	65,905	15%
			3	4	1,328	412,081	85%	65,685	15%
433	Gilroy	(32,300)	Step 1	1	46	11,532	69%	1,833	
			2	Not required					
			3	1	45	11,532	70%	1,823	1%
REGION - NORTH SAN JOAQUIN									
501	Jackson	(13,500)	Step 1	1	44	6,067	38%	1,408	
			2	Not required					
			3	1	26	6,067	65%	1,308	7%
503	San Andreas	(14,300)	Step 1	1	49	6,623	37%	1,165	
			2	Not required					
			3	1	28	6,623	65%	1,052	10%
505	Lodi	(46,300)	Step 1	2	192	41,962	60%	2,215	
			2	Not required					
			3	2	164	41,962	70%	1,989	10%
507	Stockton	(226,700) (all <150 eliminated)	Step 1	6	818	176,012	59%	28,808	
			2	2	560	176,012	86%	25,354	12%
			3	Not required					
509	Tracy	(24,900)	Step 1	1	59	11,697	54%	1,572	
			2	Not required					
			3	1	49	11,697	65%	1,512	4%
511	Modesto	(206,100) (all <100 eliminated)	Step 1	9	507	114,282	62%	14,328	
			2	4	407	114,282	77%	12,887	10%
			3	4	368	114,282	85%	12,353	14%
513	Sonora	(23,800)	Step 1	3	88	25,758	80%	1,892	--
			2	Not required					
			3	Not required					

Table 1 (cont.)

HSA #	Service Area	(Pop.) (Bed Size of Hosps. Eliminated)		#Hosp.	#Beds	Patient Days	Occupancy	Total Costs (000)	Percent Savings
REGION - NORTH SAN JOAQUIN (cont.)									
515	Merced	(808,000) (all <25 eliminated)	Step 1	3	278	55,691	55%	6,883	
			2	2	225	55,691	60%	6,572	10%
			3	2	180	55,691	85%	5,876	15%
517	Los Banos	(24,700) (all <50 eliminated)	Step 1	3	90	10,991	33%	1,186	
			2	1	51	10,991	59%	817	31%
			3	1	46	10,991	65%	777	34%
REGION - CENTRAL									
601	Madera	(43,700) (all <25 eliminated)	Step 1	2	101	17,338	47%	2,963	
			2	1	78	17,338	61%	2,720	8%
			3	1	68	17,338	70%	2,611	12%
603	Mariposa	(7,100)	Step 1	1	24	3,355	38%	401	
			2	Not required					
			3	1	14	3,355	65%	334	17%
605	Fresno	(349,800) (all <100 eliminated)	Step 1	7	1,158	250,472	59%	46,552	
			2	3	918	250,472	75%	42,109	10%
			3	3	807	250,472	85%	40,720	12%
607	Dinuba	(92,200) (all <40 eliminated)	Step 1	5	258	46,262	49%	11,717	
			2	3	184	46,262	69%	10,578	10%
			3	3	158	46,262	80%	10,285	12%
609	Coalinga	(11,200)	Step 1	1	40	4,547	31%	667	
			2	Not required					
			3	1	19	4,547	65%	559	16%
611	Visalia	(117,700) (all <87 eliminated)	Step 1	5	505	95,002	52%	13,070	
			2	2	312	95,002	83%	9,721	26%
613	Porterville	(51,600)	Step 1	2	100	19,043	52%	2,221	
			2	Not required					
			3	2	70	19,043	75%	1,955	12%

Table 1 (cont.)

HSA #	Service Area	(Pop.) (Bed Size of Hosps. Eliminated)		#Hosps.	#Beds	Patient Days	Occupancy	Total Costs (000)	Percent Savings
REGION - CENTRAL (cont.)									
615	Hanford	(64,200)	Step 1	5	272	42,528	43%	5,212	
		(all <51 eliminated)	2	2	162	42,528	72%	3,830	27%
			3	2	155	42,528	75%	3,807	27%
617	Bakersfield	(259,600)	Step 1	7	870	203,792	64%	28,854	
		(all <100 eliminated)	2	3	682	203,792	82%	25,375	12%
			3	3	657	203,792	85%	25,343	12%
619	Kern River Valley	(11,500)	Step 1	1	24	5,856	67%	667	--
			2	Not required					
			3	Not required					
621	Ridgecrest	(21,000)	Step 1	1	76	19,937	72%	2,256	--
			2	Not required					
			3	Not required					
623	Tehachapi	(27,900)	Step 1	2	41	6,198	41%	775	
		(all <15 eliminated)	2	1	28	6,198	67%	582	25%
			3	1	27	6,198	70%	570	26%
625	Taft	(18,000)	Step 1	1	48	8,356	48%	1,079	
			2	Not required					
			3	1	35	8,356	65%	1,000	7%
REGION - MID COAST									
701	Hollister	(19,500)	Step 1	1	50	6,427	35%	1,306	
			2	Not required					
			3	1	27	6,427	65%	1,116	15%
703	Santa Cruz	(101,900)	Step 1	3	380	79,596	57%	12,113	
		(all <100 eliminated)	2	2	315	79,596	69%	10,706	12%
			3	2	273	79,596	80%	10,246	15%
705	Salinas	(94,600)	Step 1	3	386	90,898	65%	10,988	
		(all <25 eliminated)	2	2	362	90,898	69%	10,586	4%
			3	2	311	90,898	80%	9,865	10%
707	Monterey	(106,900)	Step 1	2	220	61,260	76%	7,656	
			2	Not required					
			3	2	210	61,260	80%	7,540	2%

Table 1 (cont.)

HSA #	Service Area	(Pop.) (Bed Size of Hosps. Eliminated)		#Hosp.	#Beds	Patient Days	Occupancy	Total Costs (000)	Percent Savings
REGION - MID COAST (cont.)									
709	King City	(18,600)	Step 1	1	42	5,995	39%	1,016	
			2	Not required					
			3	1	25	5,995	65%	896	12%
711	Watsonville	(40,200)	Step 1	1	99	22,725	63%	2,944	
			2	Not required					
			3	1	89	22,725	70%	2,859	3%
REGION - CHANNEL COUNTIES									
801	San Luis Obispo	(109,300) (all <125 eliminated)	Step 1	6	523	86,545	45%	12,540	
			2	2	310	86,545	76%	7,958	37%
			3	2	296	86,545	80%	7,780	38%
803	Santa Maria	(76,000) (all <45 eliminated)	Step 1	3	213	39,117	50%	5,948	
			2	2	173	39,117	62%	5,508	7%
			3	2	134	39,117	80%	5,103	14%
805	Lompoc	(32,500)	Step 1	2	92	18,153	54%	1,867	
			2	Not required					
			3	2	71	18,153	70%	1,689	10%
807	Santa Barbara	(154,000) (all <125 eliminated)	Step 1	4	863	181,045	57%	37,450	
			2	2	633	181,045	78%	31,736	15%
			3	2	620	181,045	80%	31,581	16%
809	Ventura	(132,000) (all <100 eliminated)	Step 1	4	497	101,244	56%	12,688	
			2	2	397	101,244	70%	11,166	12%
			3	2	347	101,244	80%	10,624	16%
811	Oxnard	(272,200) (all <100 eliminated)	Step 1	6	753	157,160	57%	20,209	
			2	2	511	157,160	84%	16,284	19%
			3	2	507	157,160	85%	16,196	20%

Table 1 (cont.)

HSA #	Service Area	(Pop.) (Bed Size of Hosps. Eliminated)		#Hosp.	#Beds	Patient Days	Occupancy	Total Costs (000)	Percent Savings
REGION - LOS ANGELES									
901	Lancaster	(79,800)	Step 1	4	332	84,596	70%	9,525	
		(all <50 eliminated)	2	3	283	84,596	82%	8,444	11%
			3 Not required						
903	San Fernando	(262,500)	Step 1	7	690	113,600	45%	22,240	
		(all <200 eliminated)	2	2	410	113,600	76%	15,330	31%
			3	2	366	113,600	85%	14,778	34%
905	Van Nuys	(550,500)	Step 1	17	2,383	458,725	53%	71,232	
		(all <150 eliminated)	2	6	1,460	458,725	86%	54,823	23%
			3 Not required						
907	Burbank	(261,400)	Step 1	4	798	205,304	70%	28,162	
		(all <100 eliminated)	2	3	714	205,304	79%	26,195	7%
			3	3	662	205,304	85%	25,668	9%
909	Glendale	(208,700)	Step 1	5	883	200,057	62%	30,557	
		(all <100 eliminated)	2	2	678	200,057	81%	27,546	10%
			3	2	645	200,057	85%	27,228	11%
911	Pasadena	(119,300)	Step 1	5	765	174,858	63%	26,094	
		(all <100 eliminated)	2	2	649	174,858	74%	24,410	6%
			3	2	599	174,858	80%	23,992	8%
913	W. San Gabriel	(438,500)	Step 1	11	1,290	274,997	58%	47,319	
		(all <100 eliminated)	2	5	998	274,997	75%	42,869	9%
			3	5	886	274,997	85%	41,595	12%
915	E. San Gabriel	(416,400)	Step 1	7	998	215,619	59%	28,398	
		(all <100 eliminated)	2	3	689	215,619	86%	24,017	15%
			3 Not required						
917	Pomona	(166,800)	Step 1	4	503	96,224	52%	11,375	
		(all <100 eliminated)	2	1	332	96,224	79%	9,975	12%
			3	1	330	96,224	80%	9,926	13%
919	Whittier	(264,700)	Step 1	4	768	190,923	68%	24,155	
		(all <100 eliminated)	2	3	673	190,923	78%	22,255	8%
			3	3	615	190,923	85%	21,573	11%

Table 1 (cont.)

HSA #	Service Area	(Pop.) (Bed Size of Hosps. Eliminated)		#Hosp.	#Beds	Patient Days	Occupancy	Total Costs (000	Percent Savings
REGION - LOS ANGELES (cont.)									
921	Downey - Norwalk	(366,600) (all <97 eliminated)	Step 1	16	1,818	437,732	66%	56,047	
			2	9	1,387	437,732	87%	47,954	14%
			3 Not required						
923	Lynwood	(264,700) (all <90 eliminated)	Step 1	5	824	225,859	75%	23,412	
			2	3	711	225,859	87%	21,969	6%
			3 Not required						
925	Los Angeles	(1,133,200) (all <156 eliminated)	Step 1	38	8,054	2,000,329	68%	327,763	
			2	16	6,501	2,000,329	84%	279,270	15%
			3	16	6,447	2,000,329	85%	278,352	15%
927	Santa Monica	(439,800) (all <100 eliminated)	Step 1	10	2,368	598,126	69%	101,745	
			2	6	2,020	598,126	81%	96,639	5%
			3	6	1,928	598,126	85%	95,648	6%
929	Inglewood	(515,700) (all <95 eliminated)	Step 1	15	1,758	385,436	60%	59,670	
			2	7	1,315	385,436	80%	51,416	14%
			3	7	1,242	385,436	85%	50,436	15%
931	Torrance	(327,000) (all <50 eliminated)	Step 1	4	719	156,608	60%	25,351	
			2	3	670	156,608	64%	24,796	2%
			3	3	506	156,608	85%	22,950	10%
933	Long Beach	(625,200) (all <125 eliminated)	Step 1	18	3,310	789,138	65%	129,111	
			2	9	2,633	789,138	82%	118,281	8%
			3	9	2,544	789,138	85%	117,184	9%
935	Watts	(280,300) (all <300 eliminated)	Step 1	6	739	73,974	27%	26,139	
			2	1	394	73,974	51%	19,052	27%
			3	1	238	73,974	85%	17,350	34%
937	La Canada	(103,800) (all <150 eliminated)	Step 1	1	150	291*	19%	41	
			2	0				16	61%
			3 Not required						

*(80% @ 1 bed)

Table 1 (cont.)

HSA #	Service Area	(Pop.) (Bed Size of Hosps. Eliminated)		#Hosp.	#Beds	Patient Days	Occupancy	Total Costs (000)	Percent Savings
REGION - ORANGE									
1011	Anaheim	(704,600) (all <137 eliminated)	Step 1	18	2,359	442,102	51%	65,114	20%
			2	7	1,380	442,102	88%	52,385	
			3 Not required						
1013	Newport Beach	(409,700) (all <100 eliminated)	Step 1	6	903	211,451	64%	27,810	13%
			2	4	725	211,451	80%	24,313	15%
			3	4	682	211,451	85%	23,733	
1015	Santa Ana	(343,500) (all <110 eliminated)	Step 1	7	1,309	309,566	65%	54,096	6%
			2	4	1,050	309,566	81%	50,954	7%
			3	4	998	309,566	85%	50,323	
1017	South Orange	(88,300) (all <120 eliminated)	Step 1	3	403	77,273	53%	10,883	4%
			2	2	287	77,273	74%	10,476	6%
			3	2	265	77,273	80%	10,255	
REGION - IMPERIAL - RIVERSIDE - SAN DIEGO									
1101	Blythe	(14,200)	Step 1	1	36	12,041	92%	1,333	--
			2 Not required						
			3 Not required						
1103	Indio	(42,700) (all <100 eliminated)	Step 1	2	185	30,667	45%	4,562	32%
			2	1	112	30,667	75%	3,117	
			3 Not required						
1105	Palm Springs	(56,500)	Step 1	2	355	65,652	51%	10,179	7%
			2 Not required						
			3	2	240	65,652	75%	9,451	
1107	Banning	(27,100)	Step 1	1	68	17,008	69%	2,298	--
			2 Not required						
			3	1	67	17,008	70%	2,290	
1109	Hemet	(79,900) (all <50 eliminated)	Step 1	3	265	58,249	60%	6,828	6%
			2	2	229	58,249	70%	6,411	10%
			3	2	199	58,249	80%	6,165	
1111	Riverside	(258,100) (all <150 eliminated)	Step 1	6	1,086	202,108	51%	31,628	20%
			2	2	666	202,108	83%	25,400	20%
			3	2	651	202,108	85%	25,194	

Table 1 (cont.)

HSA #	Service Area	(Pop.) (Bed Size of Hosps. Eliminated)		#Hosp.	#Beds	Patient Days	Occupancy	Total Costs (000)	Percent Savings
REGION - INPERIAL - RIVERSIDE - SAN DIEGO									
1113	Oceanside	(127,600) (all <51 eliminated)	Step 1	4	328	70,986	59%	9,583	14%
			2	2	238	70,986	82%	8,253	
			3 Not required						
1115	Escondido	(116,300)	Step 1	1	233	66,892	77%	6,849	
			2 Not required						1%
			3	1	229	66,892	80%	6,748	
1117	San Diego	(637,800) (all <100 eliminated)	Step 1	12	2,185	548,244	69%	94,567	
			2	7	1,776	548,244	85%	81,974	13%
			3 Not required						
1119	National City	(192,700) (all <100 eliminated)	Step 1	3	457	100,822	60%	13,631	
			2	2	369	100,822	75%	12,184	11%
			3	2	345	100,822	80%	11,894	13%
1121	La Mesa	(247,100) (all <100 eliminated)	Step 1	5	661	143,975	60%	20,299	
			2	3	565	143,975	70%	18,991	6%
			3	3	464	143,975	85%	17,753	13%
1123	Coronado	(11,000)	Step 1	1	67	12,173	50%	2,443	
			2 Not required						4%
			3	1	51	12,173	65%	2,350	
1125	Brawley	(76,100) (all <50 eliminated)	Step 1	4	254	55,925	60%	5,479	
			2	3	220	55,925	70%	5,101	7%
			3	3	192	55,925	80%	4,793	13%
REGION - INLAND COUNTIES									
1201	Lone Pine	(8,900)	Step 1	2	46	10,871	65%	945	--
			2 Not required						
			3 Not required						
1203	Bishop	(13,300)	Step 1	1	57	12,653	61%	2,012	
			2 Not required						3%
			3	1	53	12,653	65%	1,958	

Table 1 (cont.)

HSA #	Service Area	(Pop.) (Bed Size of Hosps. Eliminated)		#Hosp.	#Beds	Patient Days	Occupancy	Total Costs (000)	Percent Savings
REGION - INLAND COUNTIES									
1205	Bridgeport	(3,100)	Step 1	1	13	1,494	32%	351	
			2 Not required						
			3	1	6	1,494	65%	316	10%
1207	Ontario-Upland	(187,300)	Step 1	5	594	90,647	42%	12,874	
			2	2	366	90,647	68%	11,104	14%
			3	2	310	90,647	80%	10,486	19%
1209	San Bernadino	(372,400) (all <150 eliminated)	Step 1	10	1,941	444,156	63%	79,061	
			2	5	1,591	444,156	77%	68,645	13%
			3	5	1,432	444,156	85%	67,096	15%
1211	Victorville	(44,900)	Step 1	2	133	33,301	69%	4,728	
			2 Not required						
			3	2	130	33,301	70%	4,710	--
1213	Barstow	(33,200)	Step 1	1	56	12,828	63%	2,123	
			2 Not required						
			3	1	50	12,828	70%	2,069	3%
1214	29-Palms	(23,300)	Step 1	2	34	10,122	82%	1,412	--
			2 Not required						
			3 Not required						
1215	Needles	(5,700)	Step 1	1	24	6,732	77%	908	--
			2 Not required						
			3 Not required						
1217	Big Bear Lake	(7,800)	Step 1	1 UNDER CONSTRUCTION - NO DATA					
			2						
			3						
	GRAND TOTAL		Step 1	554	76,059	16,855,009	61%	2,702,556	
			2	312	59,241		78%	2,388,518	12%
			3	312	55,322		83%	2,350,502	13%

SACRAMENTO/SIERRA EXPERIMENT ESTIMATES

Table 1 Estimates for Sacramento/Sierra Experiment: Medi-Cal, Medicare & Other

Table 2 Medi-Cal Estimates: Sacramento/Sierra Experiment

Table 3 Medicare Estimates: Sacramento/Sierra Experiment

Line by Line Explanation of Tables 1, 2, and 3

Table 4 Actual Data List

DRAFT

ESTIMATES FOR SACRAMENTO/SIERRA EXPERIMENT
MEDI-CAL, MEDICARE & OTHER

TABLE 1

LN NO		1972	1973	1974	1975	1976	1977	
	EXISTING SYSTEM							
1	TOTAL INPATIENT	$110,084,742	$119,970,842	$142,884,125	$157,112,619	$173,512,311	$189,912,002	16.9%
2	MEDI-CAL INPATIENT	19,028,107	22,498,570	25,948,160	27,545,380	29,449,677	32,068,059	33.8
3	MEDICARE INPATIENT	27,279,120	29,710,678	39,806,837	46,850,984	55,211,617	64,231,238	49.3
4	OTHER INPATIENT	63,777,515	67,761,594	77,129,128	82,716,255	88,851,017	93,612,705	
5	TOTAL OUTPATIENT	19,426,719	21,171,326	26,811,985	29,204,463	32,252,877	35,301,290	13.9
6	MEDI-CAL OUTPATIENT	3,343,500	3,600,000	3,910,919	4,262,717	4,578,345	4,904,254	7.8
7	MEDICARE OUTPATIENT	733,733	924,550	2,093,348	2,277,949	2,515,724	2,753,501	78.3
8	OTHER OUTPATIENT	15,349,486	16,646,776	20,807,718	22,663,797	25,158,808	27,643,535	
9	TOTAL	129,511,461	141,142,168	169,696,110	186,317,082	205,765,188	225,213,292	16.4
10	MEDI-CAL	22,371,607	26,098,570	29,859,079	31,808,097	34,028,022	36,972,313	29.7
11	MEDICARE	28,012,853	30,635,228	41,900,185	49,283,933	57,727,341	66,984,739	53.8
12	OTHER	79,127,001	84,408,370	97,936,846	105,380,052	114,009,825	121,256,240	
	EQUAL PAY SYSTEM							
13	TOTAL INPATIENT	110,084,742	119,970,842	142,884,125	157,112,619	173,512,311	189,912,002	19.7
14	MEDI-CAL INPATIENT	19,093,317	23,803,150	27,340,103	29,511,503	32,845,105	37,408,285	37.8
15	MEDICARE INPATIENT	27,664,541	33,243,807	43,068,645	51,564,362	60,416,986	71,827,719	42.5
16	OTHER INPATIENT	63,326,884	62,923,885	72,475,377	76,036,754	80,250,220	80,675,998	
17	TOTAL OUTPATIENT	19,426,719	21,171,326	26,811,985	29,204,463	32,252,877	35,301,290	21.4
18	MEDI-CAL OUTPATIENT	5,143,846	5,538,462	6,017,568	6,558,026	7,043,607	7,545,006	9.8
19	MEDICARE OUTPATIENT	1,164,644	1,299,346	2,612,261	2,847,436	3,144,655	3,441,876	68.8
20	OTHER OUTPATIENT	13,118,229	14,333,518	18,182,156	19,799,001	22,064,615	24,314,008	
21	TOTAL	129,511,461	141,142,168	169,696,110	186,317,082	205,765,188	225,213,292	20.0
22	MEDI-CAL	24,237,163	29,341,612	33,357,671	36,069,529	39,888,712	44,953,291	33.4
23	MEDICARE	28,829,185	34,543,153	45,680,906	54,411,798	63,561,641	75,269,595	46.6
24	OTHER	76,445,113	77,257,403	90,657,533	95,835,755	102,314,835	104,990,006	
	Added Cost to Gov't							
25	(= Savings to Private Payer)	2,681,888	7,686,467	7,279,313	9,544,297	11,694,990	16,265,834	49.1
26	MEDI-CAL	1,865,556	3,778,542	3,498,592	4,261,432	5,860,690	7,980,978	50.9
27	MEDICARE	816,332	3,907,925	3,780,721	5,282,865	5,834,300	8,284,856	

DRAFT

MEDI-CAL ESTIMATES
SACRAMENTO/SIERRA EXPERIMENT

TABLE 2

(Assuming Foundation Contr. Allow Same as Non-PHP Contr. Allow)

LN* NO		1972	1973	1974	1975	1976	1977
	EXISTING SYSTEM						
2a	NON-PHP INPATIENT	$ 19,028,107	$ 19,348,570	$ 21,156,589	$ 22,011,478	$ 22,573,951	$ 22,808,431
2b	PHP INPATIENT	-	3,150,000	4,791,571	5,533,902	6,875,726	9,259,628
2	TOTAL MEDI-CAL INPATIENT	19,028,107	22,498,570	25,948,160	27,545,380	29,449,677	32,068,059
6a	NON-PHP OUTPATIENT	3,343,500	3,278,000	3,054,000	3,095,252	2,950,752	2,853,928
6b	PHP OUTPATIENT	-	322,000	856,919	1,167,465	1,627,593	2,050,326
6	TOTAL MEDI-CAL OUTPATIENT	3,343,500	3,600,000	3,910,919	4,262,717	4,578,345	4,904,254
10a	TOTAL NON-PHP	22,371,607	22,626,570	24,210,589	25,106,730	25,524,703	25,662,359
10b	TOTAL PHP	-	3,472,000	5,648,490	6,701,367	8,503,319	11,309,954
10	TOTAL MEDI-CAL	22,371,607	26,098,570	29,859,079	31,808,097	34,028,022	36,972,313
	EQUAL PAY SYSTEM						
14a	NON-PHP INPATIENT	19,093,317	20,470,497	22,291,497	23,582,604	25,176,636	26,606,671
14b	PHP INPATIENT	-	3,332,653	5,048,606	5,928,899	7,668,469	10,801,614
14	TOTAL MEDI-CAL INPATIENT	19,093,317	23,803,150	27,340,103	29,511,503	32,845,105	37,408,285
18a	NON-PHP OUTPATIENT	5,143,846	5,043,077	4,699,231	4,761,926	4,539,618	4,390,658
18b	PHP OUTPATIENT	-	495,385	1,318,337	1,796,100	2,503,989	3,154,348
18	TOTAL OUTPATIENT	5,143,846	5,538,462	6,017,568	6,558,026	7,043,607	7,545,006
22a	TOTAL NON-PHP	24,237,163	25,513,574	26,990,728	28,344,530	29,716,254	30,997,329
22b	TOTAL PHP	-	3,828,038	6,366,943	7,724,999	10,172,458	13,955,962
22	TOTAL MEDI-CAL	24,237,163	29,341,612	33,357,671	36,069,529	39,888,712	44,953,291
	ADDED COST OF EQUAL PAY						
	NON-PHP INPATIENT	65,210	1,121,927	1,134,908	1,571,126	2,602,685	3,798,240
	PHP INPATIENT	-	182,653	257,035	394,997	792,743	1,541,986
	TOTAL MEDI-CAL INPATIENT	65,210	1,304,580	1,319,943	1,966,123	3,395,428	5,340,226
	NON-PHP OUTPATIENT	1,800,346	1,765,077	1,644,731	1,666,674	1,588,866	1,536,730
	PHP OUTPATIENT	-	173,385	461,418	628,635	876,396	1,104,022
	TOTAL MEDI-CAL OUTPATIENT	1,800,346	1,938,462	2,106,149	2,295,309	2,465,262	2,640,752
26a	TOTAL NON-PHP	1,865,556	2,887,004	2,780,139	3,237,800	4,191,551	5,334,970
26b	TOTAL PHP	-	891,538	718,453	1,023,632	1,669,139	2,646,008
26	TOTAL MEDI-CAL	1,865,556	3,778,542	3,498,592	4,261,432	5,860,690	7,980,978
	State Share (@ 40%)						3,192,391

* Numbers correspond with Line Numbers for Table 1

DRAFT

MEDICARE ESTIMATES
SACRAMENTO/SIERRA EXPERIMENT

TABLE 3

LN* NO		1972	1973	1974	1975	1976	1977	
	EXISTING SYSTEM							
3	MEDICARE INPATIENT	$ 27,279,120	$ 29,710,678	$ 39,806,837	$ 46,850,984	$ 55,211,617	$ 64,231,238	
7	MEDICARE OUTPATIENT	733,733	924,550	2,093,348	2,277,949	2,515,724	2,753,501	
11	TOTAL MEDICARE	28,012,853	30,635,228	41,900,185	49,128,933	57,727,341	66,984,739	
	EQUAL PAY SYSTEM							
15	MEDICARE INPATIENT	27,664,541	33,243,807	43,068,645	51,564,362	60,416,986	71,827,719	
19	MEDICARE OUTPATIENT	1,164,644	1,299,346	2,612,261	2,847,436	3,144,655	3,441,876	
23	TOTAL MEDICARE	28,829,185	34,543,153	45,680,906	54,411,798	63,561,641	76,269,595	
	ADDED COST							
	MEDICARE INPATIENT	385,421	3,533,129	3,261,808	4,713,378	5,205,369	7,596,481	11.8%
	MEDICARE OUTPATIENT	430,911	374,796	518,913	569,487	628,931	688,375	25.0
27	TOTAL MEDICARE	816,332	3,907,925	3,780,721	5,282,865	5,834,300	8,284,856	12.4

* Numbers correspond with Line Numbers for Table 1.

LINE BY LINE EXPLANATION OF TABLES 1, 2, AND 3

LINE NUMBER[1]	DESCRIPTION	EXPLANATION
EXISTING SYSTEM		
1	Total Inpatient	This represents aggregate inpatient operating expenses. Years 1972-74 were calculated as follows: Inpatient Revenue (C)[2] / Total Revenue (B) x Total Expenses (A) = Total Inpatient Expenses (Line 1) Years 1975-77 were projected, applying a least squares trend method to the 1972-74 actual data.
2	Medi-Cal Inpatient	This represents aggregate amounts reimbursed by Medi-Cal (Non-PHP + PHP) See 2a and 2b below for description of how actual amount reimbursed was calculated. Projections for 1975-77 are based on the trend of amount reimbursed for Medi-Cal inpatients as a percent of total inpatient operating expenses.
2a	Non-PHP Inpatient	Years 1972-74 are calculated from actual data as follows: Medi-Cal I/P Reimbursable Expenses (T) - Nursing Differential Refund (O) + Professional Component (Q) + Reimbursable Return on Equity (U) - Patient and Third Party Liability (W) = Amount Reimbursed by Government - Non-PHP Medi-Cal (Line 2a) Years 1975-77 are based on the trend of Amount Reimbursed by Government for non-PHP inpatients as a percent of total inpatient operating expenses.
2b	PHP Inpatient	This represents the actual amounts reimbursed by Medi-Cal for PHP inpatients. Years 1974-75 are actual data (K) 1973 is estimated, and years 1976-77 are projections based on the trend of amount reimbursed for PHP inpatients as a percent of total inpatient operating expenses.
3	Medicare Inpatient	This represents the aggregate amounts reimbursed by Medicare. 1972-1974 actual data are calculated as follows: Medicare I/P Reimbursable Expenses (M) + Nursing Differential (P) + Professional Component (Pt. B portion @ 80 because of coinsur.) (P) + I/P Ancillary (Pt. B @ 80% because of coinsurance) (I) + Reimbursable Return on Equity (V) - Deductibles (X) = Amount Reimbursed by Government - Medicare (Line 3) Years 1975-77 are based on the trend of Amount Reimbursed by Government for Medicare inpatients as a percent of total inpatient operating expenses.

1 Refers to Line Numbers on Tables 1, 2 and 3
2 Refers to Actual Data List, Table 4

LINE NUMBER	DESCRIPTION	EXPLANATION
Existing System		
4	Other Inpatient	This represents the amounts paid by private self-pay and third-party pay inpatients. For all years it is derived as follows: Total Inpatient Expenses (Line 1) - Medi-Cal Inpatient Expenses (Line 2) - Medicare Inpatient Expenses (Line 3) = Other Inpatient Expenses (Line 4)
5	Total Outpatient	This represents aggregate outpatient operating expenses. Years 1972-74 were calculated as follows: Outpatient Revenue (D) / Total Revenue (B) x Total Operating Expenses (A) = Total Outpatient Expenses (Line 5) Years 1975-77 are projected on the assumption that the relationship between inpatient and outpatient activity and expenses would remain constant, thus projected outpatient expenses represent 16% of total expenses for each of the projected years. (This assumption does not adequately incorporate the shift toward outpatient care that is expected, however, data were insufficient to predict the effects of any such shift. As a result, outpatient expenses may be slightly understated, and inpatient expenses could be slightly overstated.
6	Medi-Cal Outpatient	This represents the aggregate amount reimbursed by government for outpatient Medi-Cal services. Except as noted below in 6a and 6b, data are actual for 1972-75, with 1976-77 projections calculated by least squares trend method.
6a	Non-PHP Outpatient	Actual amounts reimbursed by Medi-Cal with the following adjustments: - For 1972, only 3 months of actual data were available, therefore the 3 months actual amount was divided by .25 to reach the 1972 amount. - For 1975, 8 months' data were available, therefore the 8 month actual amount was divided by .67 to reach the 1975 amount. Projections for 1976-77 were by least squares trend method.

LINE NUMBER	DESCRIPTION	EXPLANATION
Existing System		
6b	PHP Outpatient	Actual amounts were available for 1974 and 1975 only. The 1973 amount was estimated as follows: - The total amount spent by Medi-Cal (including non-PHP) for outpatients was assumed to have grown at a steady rate between 1972 and 1974. Therefore, the total was estimated at $3.6 million for 1973. Thus, Total Medi-Cal Outpatient (Line 6) - Non-PHP Medi-Cal Outpatient (Line 6a) = PHP Medi-Cal Outpatient (Line 6b) Projections for 1976-77 were by least squares trend method.
7	Medicare Outpatient	For 1972-74, actual amount reimbursed by government for Medicare outpatient was calculated as follows: Medicare O/P Reimbursable Expenses (N) + O/P Professional Component (S) - Deductibles (T) (Y) x .80 (coinsurance) = Amount Reimbursed by Government for Outpatient Medicare (Line 7) For 1975-77 projections, the percent of Medicare outpatient of total outpatient was held at the 1974 level of 7.8% Medicare. A large discrepancy between 1973 and 1974 data would have distorted regression projections.
8	Other Outpatient	This represents the amounts paid by private self-pay and third-party pay outpatients. For all years it is derived as follows: Total Outpatient Expenses (Line 5) - Medi-Cal Outpatient Expenses (Line 6) - Medicare Outpatient Expenses (Line 7) = Other Outpatient Expenses (Line 8)
9	Total	This represents the total costs of care, for inpatient and outpatient. It is the sum of Line 1 + Line 5.
10	Medi-Cal	This represents the total amount reimbursed by the government for care rendered Medi-Cal inpatients and outpatients. It is the sum of Line 2 + Line 6.

LINE NUMBER	DESCRIPTION	EXPLANATION
Existing System		
11	Medicare	This represents the total amount reimbursed by the government for care rendered Medicare inpatients and outpatients. It is the sum of Line 3 + Line 7.
12	Other	This represents the total amount paid by private patients and third party payers for inpatient and outpatient care. It is the sum of Line 4 + Line 8.
EQUAL PAY SYSTEM		The basic assumption underlying the equal pay estimates is that government payers under the Medi-Cal and Medicare programs will pay the full cost of rendering care to Medi-Cal and Medicare patients. The total expenses of the hospital would remain the same, but there would be a redistribution of the reimbursements to align with the actual cost of the care. The result of this redistribution is that the governmental shares increase, while the costs to the private payers decrease.
13	Total Inpatient	Total inpatient operating expenses under the equal pay system remain the same as they are under the existing system. Therefore, Line 13 = Line 1.
14	Medi-Cal Inpatient	Under equal payment, government would pay for actual costs of providing care. The formulae for deriving Medi-Cal Inpatient are described below (14a and 14b). Actual data were the bases of 1972-74 figures; projections for 1975-76 were done in the same manner described above (see Line 2).
14a	Non-PHP Medi-Cal	Medi-Cal Inpatient Operating Expenses (see below) were substituted for Medi-Cal Inpatient Reimbursable Expenses in the calculation of equal pay non-PHP Medi-Cal Inpatient. Thus, the formula becomes: Medi-Cal Inpatient Operating Expenses (see below) - Nursing Differential Refund (O) + Professional Component (Q) + Reimbursable Return on Equity (U) - Patient and Third Party Liability (W) = Amount Government should pay for inpatient Medi-Cal under equal pay system (Line 14a) Medi-Cal Inpatient Operating Expenses were calculated as follows: $\frac{\text{Medi-Cal I/P Charges (E)}}{\text{Total I/P Charges (B)}} \times \text{Total Expenses (A)} = \text{Medi-Cal I/P Operating Exp.}$

LINE NUMBER	DESCRIPTION	EXPLANATION
Equal Pay System		
14b	PHP Medi-Cal	Actual data on the difference between the cost of providing care and the amount reimbursed by the PHP program were not available, as contractual agreements control the charges billed by the hospital. After consultation with representatives of several Sacramento area hospitals, it was determined that the discounts for the PHPs approximate the discounts for the non-PHP Medi-Cal, therefore, the non-PHP percent difference between actual costs and reimbursements was applied to the actual PHP reimbursement data to reach the equal pay PHP inpatient amount. [e.g., in 1977, the non-PHP portion, government's equal pay liability was 17% higher than it actually reimbursed. Accordingly, the PHP amount actually reimbursed was augmented by 17% to reach the PHP equal pay liability (Line 14b).
15	Medicare Inpatient	For years 1972-74, actual data were used to calculate Medicare Inpatient (see below); 1975-77 projections were done in the same manner described for Line 3. Medicare Inpatient Operating Expenses (see below) were substituted for Medicare Inpatient Reimbursable Expenses in the calculation of Medicare equal pay amount. Thus the formula becomes: Medicare I/P Operating Expenses (see below) + Nursing Differential (P) + Professional Component (Part B portion @ 80% because of coinsurance) (R) + I/P Ancillary (Part B @ 80% because of coinsurance) (I) + Reimbursable Return on Equity (V) - Deductibles (X) = Amount Government should pay for inpatient Medicare under equal pay system (Line 15) Medicare Inpatient Operating Expenses were calculated as follows: Medicare I/P Charges (E) / Total I/P Charges (C) x Total Expenses (A) = Medicare I/P Operating Exp.
16	Other Inpatient	This represents the amounts private and third party payers would pay under an equal pay system. For all years it is derived as follows: Total Inpatient Expenses (Line 13) - Medi-Cal Inpatient Expenses (Line 14) - Medicare Inpatient Expenses (Line 15) = Other Inpatient (Line 16)

LINE NUMBER	DESCRIPTION	EXPLANATION
Equal Pay System		
17	Total Outpatient	Total outpatient operating expenses under the equal pay system remain the same as they are under the existing system. Therefore, Line 17 = Line 5.
18	Medi-Cal Outpatient	The formulae for deriving Medi-Cal Outpatient are described below (18a and 18b). Actual data were the bases for 1972-75 figures (with the exceptions described in 6a and 6b above); projections for 1976-77 were done in the same manner described above (see Line 6).
18a 18b	Non-PHP Outpatient PHP Outpatient	Only actual amount reimbursed data were available for both PHP and non-PHP outpatient. Representatives from 6 hospitals in Sacramento and Placer Counties estimated Medi-Cal Reimbursements were at 65% of actual costs. Therefore, the following formula was used to derive the equal pay Medi-Cal outpatient amount: $\frac{\text{Medi-Cal Outpatient Reimbursement (Line 6a and Line 6b)}}{.65}$ = Amount Government should pay for outpatient Medi-Cal under equal pay system (Line 18)
19	Medicare Outpatient	For years 1972-74, actual data were used; 1975-77 projections were done in the same manner described for Line 7. Medicare Outpatient Operating Expenses (see below) were substituted for Medicare Outpatient Reimbursable Expenses in the calculation of Medicare equal pay amount. Thus, the formula becomes: Medicare O/P Operating Expenses (see below) + O/P Professional Component (S) - Deductibles (Y) x .80 (coinsurance) = Amount Government should pay for Medicare outpatient under equal pay system (Line 19) Medicare O/P Operating Expenses were calculated as follows: $\frac{\text{Medicare O/P Charges (G)}}{\text{Total O/P Charges (D)}}$ x Total Expenses = Medicare O/P Operating Exp.

LINE NUMBER	DESCRIPTION	EXPLANATION
Equal Pay System		
20	Other Outpatient	This represents the amounts private and third party payers would pay under an equal pay system. For all years it is derived as follows: Total Outpatient Expenses (Line 17) - Medi-Cal Outpatient Expenses (Line 18) - Medicare Outpatient Expenses (Line 19) = Other Outpatient (Line 20)
21	Total	This represents the total cost of care for inpatient and outpatient under an equal pay system. Because total costs will not change by virtue of equal pay, Line 21 = Line 9.
22	Medi-Cal	This represents the total equal pay liability of government for Medi-Cal inpatients. It is the sum of Line 14 + Line 18.
23	Medicare	This represents the total equal pay liability of government for Medicare inpatientssand outpatients. It is the sum of Line 15 + Line 19.
24	Other	This represents the total amount to be paid by private and third party payers for inpatient and outpatient care under the equal pay system. It is the sum of Line 16 + Line 20.
25	Added Cost to Government	This represents the additional amount government would pay for Medi-Cal and Medicare under the equal pay system. This represents a corresponding savings to private and third party payers. It is the difference of (Line 18 + Line 19) - (Line 10 + Line 11).
26	Medi-Cal	This represents the added Medi-Cal costs of equal pay. It is the difference of Line 22 - Line 10.
27	Medicare	This represents the added Medicare costs of equal pay. It is the difference of Line 23 - Line 11.

ACTUAL DATA LIST

Table 4

Listed below are descriptions of the actual data elements extracted for the Sacramento Experiment cost estimates. The sources of these data were:

Number	Source	Years	Detail
1	Medi-Cal Cost Reports	1972-74	By Hospital
2	Medicare Cost Reports	1972-74	By Hospital
3	Foundation Community Health Plan	1973-74	HSA Aggregate
4	State Department of Health, Medi-Cal Month of Payment Data	1972-75	By County
5	American Hospital Association, Annual Survey Tape	1972-74	By Hospital

Reference Letter	Data Description	Source
(A)	Total Operating Expenses	1,2,5
(B)	Total Revenue	1,2,5
(C)	Inpatient Revenue	1,2,5
(D)	Outpatient Revenue	1,2,5
(E)	Medi-Cal Charges - Inpatient	1
(F)	Medicare Charges - Inpatient	2
(G)	Medicare Charges - Outpatient	2
(H)	Total Reimbursable Expenses	1,2
(I)	Medi-Cal Reimbursable Expenses - Inpatient	1
(J)	Amount Reimbursed - Medi-Cal Outpatient	4
(K)	Amount Reimbursed - PHP Inpatient	3
(L)	Amount Reimbursed - PHP Outpatient	3
(M)	Medicare Reimbursable Expenses - Inpatient	2
(N)	Medicare Reimbursable Expenses - Outpatient	2
(O)	Nursing Differential Refund - Medi-Cal	1
(P)	Nursing Differential - Medicare	2
(Q)	Professional Component - Inpatient Medi-Cal	1
(R)	Professional Component - Inpatient Medicare	2
(S)	Professional Component - Outpatient Medicare	2
(T)	Inpatient Ancillary Part B - Medicare	2
(U)	Reimbursable Return on Equity - Medi-Cal	1
(V)	Reimbursable Return on Equity - Medicare	2
(W)	Amount Billed Patient and Third Parties (including copayment) - Medi-Cal	1
(X)	Amount Billed Patient and Third Parties (Deductibles) Inpatient - Medicare	2
(Y)	Amount Billed Patient and Third Parties (Deductibles and coinsurance) Outpatient - Medicare	2

CALIFORNIA HEALTH FACILITIES COMMISSION

SYSTEM OF ACCOUNTS

CHART OF ACCOUNTS - BALANCE SHEET 2100

UNRESTRICTED FUND ASSETS 2110

Current Assets 2110.1

1010 - 1019	CASH
1011.00	General Checking Accounts
1012.00	Payroll Checking Accounts
1013.00	Other Checking Accounts
1014.00	Imprest Cash Funds
1015.00	Savings Accounts
1016.00	Certificates of Deposit
1017.00	Other Cash Accounts
1020 - 1029	MARKETABLE SECURITIES
1021.00	Unrestricted Marketable Securities
1022.00	Other Current Investments
1030 - 1039	ACCOUNTS AND NOTES RECEIVABLE
1031.00	Inpatient Receivables - Unbilled
1032.00	Inpatient Receivables - Medicare
1033.00	PIP Clearing Account
1034.00	Inpatient Receivables - Medi-Cal
1035.00	Inpatient Receivables - Other
1036.00	Outpatient Receivables - Unbilled
1037.00	Outpatient Receivables - Medicare

SYSTEM OF ACCOUNTS

1038.00	Outpatient Receivables - Medi-Cal
1039.00	Outpatient Receivables - Other
1040 - 1049	ALLOWANCE FOR UNCOLLECTIBLE RECEIVABLES AND THIRD-PARTY CONTRACTUAL WITHHOLDS
1041.00	Allowance for Bad Debts
1042.00	Allowance for Contractual Adjustments - Medicare
1043.00	Allowance for Contractual Adjustments - Medi-Cal
1044.00	Other Allowances
1050 - 1059	RECEIVABLES FROM THIRD-PARTY PAYORS
1051.00	Other Receivables - Third-Party Cost Report Settlement - Medicare
1052.00	Other Receivables - Third-Party Cost Report Settlement - Medi-Cal
1053.00	Other Receivables - Third-Party Cost Report Settlement - Other
1060 - 1069	PLEDGES AND OTHER RECEIVABLES
1061.00	Pledges
1062.00	Allowance for Uncollectible Pledges
1063.00	Grants and Legacies
1064.00	Accrued Receivables
1065.00	Accounts and Notes Receivable - Staff, Employees, etc.
1066.00	Due from Parent/Subsidiary
1067.00	Other Receivables
1070 - 1079	DUE FROM RESTRICTED FUNDS
1071.00	Due from Plant Replacement and Expansion Funds

1072.00	Due from Specific Purpose Funds
1073.00	Due from Endowment Funds
1080 - 1089	INVENTORY
1081.00	Inventory - General Stores
1082.00	Inventory - Pharmacy
1083.00	Inventory - Central Supply
1084.00	Inventory - Dietary
1085.00	Inventory - Plant Operation and Maintenance
1086.00	Inventory - Research
1087.00	Inventory - Education
1088.00	Inventory - Other
1090 - 1099	PREPAID EXPENSES AND OTHER CURRENT ASSETS
1091.00	Prepaid Insurance
1092.00	Prepaid Interest
1093.00	Prepaid Rent
1094.00	Prepaid Pension Plan Expense
1095.00	Prepaid Taxes
1096.00	Prepaid Service Contracts
1097.00	Deposits
1098.00	Other Prepaid Expenses
1099.00	Other Current Assets

Board Designated Assets 2110.2

1110 - 1119	BOARD DESIGNATED CASH
1111.00	Board Designated Checking Accounts

SYSTEM OF ACCOUNTS

1112.00	Board Designated Savings Accounts
1113.00	Board Designated Certificates of Deposit
1114.00	Board Designated Other Cash Accounts
1120 - 1129	BOARD DESIGNATED MARKETABLE SECURITIES
1121.00	Board Designated Marketable Securities
1122.00	Board Designated Other Current Investments
1130 - 1139	BOARD DESIGNATED OTHER ASSETS
1131.00	Board Designated - Pledges Receivable
1132.00	Board Designated - Allowance for Uncollectible Pledges
1133.00	Board Designated - Investments in Land
1134.00	Board Designated - Other Investments
1135.00	Board Designated - Other Assets

2110.3

Property, Plant, and Equipment

1200 - 1209	LAND
1210 - 1219	LAND IMPROVEMENTS
1211.00	Parking Lot
1212.00	Other
1220 - 1229	BUILDINGS & IMPROVEMENTS
1221.00	Hospital Buildings
1222.00	Student Housing Facilities
1223.00	Employee Housing Facilities
1224.00	Parking Structures
1225.00	Fixed Equipment
1226.00	Other

SYSTEM OF ACCOUNTS

1230 - 1239 LEASEHOLD IMPROVEMENTS

1240 - 1249 EQUIPMENT

1241.00 Major Movable Equipment

1242.00 Minor Equipment

1250 - 1259 CONSTRUCTION-IN-PROGRESS

1260 - 1269 ACCUMULATED DEPRECIATION - LAND IMPROVEMENTS

1261.00 Parking Lots

1262.00 Other

1270 - 1279 ACCUMULATED DEPRECIATION - BUILDINGS

1271.00 Hospital Buildings

1272.00 Student Housing Facilities

1273.00 Employee Housing Facilities

1274.00 Parking Structures

1275.00 Fixed Equipment

1276.00 Other

1280 - 1289 ACCUMULATED DEPRECIATION - LEASEHOLD IMPROVEMENTS

1290 - 1299 ACCUMULATED DEPRECIATION - EQUIPMENT

1291.00 Accumulated Depreciation - Major Movable Equipment

1292.00 Accumulated Depreciation - Minor Equipment

Investments and Other Assets 2110.4

1310 - 1319 INVESTMENT IN PROPERTY, PLANT, AND EQUIPMENT

1320 - 1329 ACCUMULATED DEPRECIATION - INVESTMENTS IN PLANT AND EQUIPMENT

1330 - 1339 OTHER INVESTMENTS

1340 - 1349 OTHER ASSETS

Intangible Assets 2110.5

1350 - 1359 GOODWILL

1360 - 1369 UNAMORTIZED LOAN COST

1370 - 1379 PREOPENING AND OTHER ORGANIZATION COSTS

1380 - 1389 OTHER INTANGIBLE ASSETS

SYSTEM OF ACCOUNTS

PLANT REPLACEMENT AND EXPANSION FUND ASSETS 2120

1410 - 1419 CASH

1411.00 Checking Accounts

1412.00 Savings Accounts

1413.00 Certificates of Deposit

1414.00 Other Cash Accounts

1420 - 1429 INVESTMENTS

1421.00 Marketable Securities

1422.00 Other Investments

1430 - 1439 RECEIVABLES

1431.00 Pledges Receivable

1432.00 Allowance for Uncollectible Pledges

1433.00 Grants, Legacies, and Bequests Receivable

1434.00 Interest Receivable

1435.00 Other Receivables

1440 - 1449 DUE FROM OTHER FUNDS

1441.00 Due from Unrestricted Fund

1442.00 Due from Specific Purpose Fund

1443.00 Due from Endowment Fund

1450 - 1499 OTHER ACCOUNTS (AS NEEDED)

SYSTEM OF ACCOUNTS

SPECIFIC PURPOSE FUND ASSETS

1510 - 1519	CASH
1511.00	Checking Accounts
1512.00	Savings Accounts
1513.00	Certificates of Deposit
1514.00	Other Cash Accounts
1520 - 1529	INVESTMENTS
1521.00	Marketable Securities
1522.00	Other Investments
1530 - 1539	RECEIVABLES
1531.00	Pledges Receivable
1532.00	Allowance for Uncollectible Pledges
1533.00	Grants Receivable
1534.00	Legacies and Bequests Receivable
1535.00	Accrued Interest Receivable
1536.00	Other Receivables
1540 - 1549	DUE FROM OTHER FUNDS
1541.00	Due from Unrestricted Fund
1542.00	Due from Plant Replacements and Expansion Fund
1543.00	Due from Endowment Fund
1550 - 1599	OTHER ACCOUNTS (AS NEEDED)

SYSTEM OF ACCOUNTS

ENDOWMENT FUND ASSETS 2140

1610 - 1619	CASH
1611.00	Checking Accounts
1612.00	Savings Accounts
1613.00	Certificates of Deposit
1614.00	Other Cash Accounts
1620 - 1629	INVESTMENTS
1621.00	Marketable Securities
1622.00	Mortgages
1623.00	Real Property
1624.00	Accumulated Depreciation on Real Property
1625.00	Other Investments
1630 - 1639	RECEIVABLES
1631.00	Legacies and Bequests
1632.00	Pledges
1633.00	Allowance for Uncollectible Pledges
1634.00	Interest Receivable
1635.00	Rent Receivable
1636.00	Dividends Receivable
1637.00	Trust Income Receivable
1638.00	Other Receivables
1640 - 1649	DUE FROM OTHER FUNDS
1641.00	Due from Unrestricted Fund
1642.00	Due from Plant Replacement and Expansion Fund
1643.00	Due from Specific Purpose Fund
1650 - 1699	OTHER ACCOUNTS (AS NEEDED)

UNRESTRICTED FUND LIABILITIES		2150
Current Liabilities		2150.1
2010 - 2019	NOTES AND LOANS PAYABLE	
2011.00	Notes and Loans Payable - Vendors	
2012.00	Notes and Loans Payable - Banks	
2013.00	Other notes and Loans Payable	
2020 - 2029	ACCOUNTS PAYABLE	
2021.00	Trade Payables	
2022.00	Other Accounts Payable	
2030 - 2039	ACCRUED COMPENSATION AND RELATED LIABILITIES	
2031.00	Accrued Payroll	
2032.00	Accrued Vacation, Holiday, and Sick Pay	
2033.00	Other Accrued Salaries and Wages Payable	
2034.00	Non-Paid Worker Compensation Payable	
2035.00	Federal Income Taxes Withheld	
2036.00	Social Security Taxes Withheld and Accrued	
2037.00	State Income Taxes Withheld	
2038.00	Unemployment Taxes Payable	
2039.00	Other Payroll Taxes and Deductions Payable	
2040 - 2049	OTHER ACCRUED EXPENSES	
2041.00	Interest Payable	
2042.00	Rent Payable	
2043.00	Property Taxes Payable	

SYSTEM OF ACCOUNTS

2044.00	Fees Payable - Medical Specialists
2045.00	Fees Payable - Other
2046.00	Other Accrued Expenses Payable
2050 - 2059	ADVANCES FROM THIRD-PARTY PAYORS
2051.00	Advances - Medicare
2052.00	Advances - Other Third-Party Payors
2060 - 2069	PAYABLE TO THIRD-PARTY PAYORS
2061.00	Reimbursement Settlement Due - Medicare
2062.00	Reimbursement Settlement Due - Medi-Cal
2063.00	Reimbursement Settlement Due - Other
2070 - 2079	DUE TO RESTRICTED FUNDS
2071.00	Due to Plant Replacement and Expansion Fund
2072.00	Due to Specific Purpose Fund
2073.00	Due to Endowment Fund
2080 - 2089	INCOME TAXES PAYABLE
2081.00	Federal Income Taxes Payable
2082.00	State Income Taxes Payable
2090 - 2099	OTHER CURRENT LIABILITIES
2091.00	Deferred Income - Patient Deposits
2092.00	Deferred Income - Tuition and Fees
2093.00	Deferred Income - Other
2094.00	Dividends Payable
2095.00	Bank Overdrafts

2096.00 Due to Parent/Subsidiary

2097.00 Construction Retention Payable

2098.00 Construction Contracts Payable

2099.00 Other Current Liabilities

2150.2

Deferred Credits

2110 - 2119 DEFERRED INCOME TAXES

2111.00 Deferred Taxes Payable - State

2112.00 Deferred Taxes Payable - Federal

2120 - 2129 DEFERRED THIRD-PARTY INCOME

2121.00 Deferred Revenue - Medicare Reimbursement

2122.00 Deferred Revenue - Medi-Cal Reimbursement

2123.00 Deferred Revenue - Other Third-party Reimbursement

2130 - 2139 OTHER DEFERRED CREDITS

2131.00 Other Deferred Items

2150.3

Long-Term Debt

2210 - 2219 MORTGAGES PAYABLE

2220 - 2229 CONSTRUCTION LOANS

2230 - 2239 NOTES UNDER REVOLVING CREDIT

2240 - 2249 CAPITALIZED LEASE OBLIGATIONS

2250 - 2259 BONDS PAYABLE

2260 - 2269 NOTES AND LOANS PAYABLE TO PARENT

2270 - 2279 OTHER NON-CURRENT LIABILITIES

PLANT REPLACEMENT AND EXPANSION FUND LIABILITIES 2160

2410 - 2419 DUE TO UNRESTRICTED FUND

2420 - 2429 DUE TO SPECIFIC PURPOSE FUND

2430 - 2439 DUE TO ENDOWMENT FUND

SPECIFIC PURPOSE FUND LIABILITIES 2170

2510 - 2519 DUE TO UNRESTRICTED FUND

2520 - 2529 DUE TO PLANT REPLACEMENT AND EXPANSION FUND

2530 - 2539 DUE TO ENDOWMENT FUND

ENDOWMENT FUND LIABILITIES 2180

Non-Current Liabilities 2180.1

2610 - 2619 MORTGAGES

2620 - 2629 OTHER NON-CURRENT LIABILITIES

Due to Other Funds 2180.2

2630 - 2639 DUE TO UNRESTRICTED FUND

2640 - 2649 DUE TO PLANT REPLACEMENT AND EXPANSION FUND

2650 -2659 DUE TO SPECIFIC PURPOSE FUND

SYSTEM OF ACCOUNTS

FUND BALANCES 2190

2190.1

Non-Profit

2310 - 2399 UNRESTRICTED FUND BALANCE

2310.00 Fund Balance

2320.00 Capital Outlay

2330.00 Donated Property, Plant, and Equipment

Plant	Specific	Endowment	
2470.00	2570.00	2670.00	Restricted Funds
2471.00	2571.00	2671.00	Fund Balance
2472.00	2572.00	2672.00	Capital Outlay
2473.00	2573.00	2673.00	Transfers to Unrestricted Fund for Operating Purposes

2190.2

Investor-Owned - Corporation

2310.00 Preferred Stock

2320.00 Common Stock

2330.00 Additional Paid-in Capital

2340.00 Retained Earnings - Unrestricted

2350.00 Treasury Stock

Plant	Specific	Endowment	
2470.00	2570.00	2670.00	Restricted Funds
2471.00	2571.00	2671.00	Fund Balance
2472.00	2572.00	2672.00	Capital Outlay
2473.00	2573.00	2673.00	Transfers to Unrestricted Fund for Operating Purposes

SYSTEM OF ACCOUNTS

Investor-Owned - Partnership

2310.00 Capital - Unrestricted

2320.00 Partners' Draw

Plant	Specific	Endowment	
2470.00	2570.00	2670.00	Restricted Funds
2471.00	2571.00	2671.00	Fund Balance
2472.00	2572.00	2672.00	Capital Outlay
2473.00	2573.00	2673.00	Transfers to Unrestricted Fund for Operating Purposes

SYSTEM OF ACCOUNTS

CHART OF ACCOUNTS - INCOME STATEMENT 2200

REVENUE ACCOUNTS 2210

Daily Hospital Services Revenue 2210.1

3010 MEDICAL/SURGICAL INTENSIVE CARE

3020 CORONARY CARE

3030 DEFINITIVE OBSERVATION

3040 PEDIATRIC INTENSIVE CARE

3041 Neonatal Intensive Care
3042 Medical Surgical Intensive Care
3043 Coronary Care
3044 Burn Care
3045 Other

3050 PSYCHIATRIC ISOLATION

3060 OTHER INTENSIVE CARE UNITS

3061
3062 Pulmonary
3063 Heart Transplant
3064 Burn Care
3065
3066 Other

3080 MEDICAL/SURGICAL ACUTE

3081 Medical
3082 Surgical

3120 PEDIATRIC ACUTE

3121 Medical/Surgical
3122 Neonatal
3123 Psychiatric
3124 Isolation
3125 Rehabilitation
3126 Other

3140 PSYCHIATRIC ACUTE

3160 OBSTETRICS ACUTE

SYSTEM OF ACCOUNTS

3170 NURSERY ACUTE

3171 Premature

3172 Newborn

3173 Other Nursery Units

3180 OTHER ACUTE CARE UNITS

3181 Detoxification

3182 Communicable Disease

3183 Other

3200 SKILLED NURSING

3201 Rehabilitation

3202 Extended Care Facility

3240 PSYCHIATRIC - LONG-TERM

3280 INTERMEDIATE

3320 RESIDENTIAL

3360 OTHER DAILY HOSPITAL SERVICES (SPECIFY)

Ancillary Service Revenue 2210.2

4010 LABOR AND DELIVERY

4020 SURGERY AND RECOVERY

4021 Surgery - General (Major)

4022 Surgery - Organ Transplants

4023 Surgery - Open Heart

4024 Surgery - Neurosurgery

4025 Surgery - Orthopedic

4026 Surgery - Minor

4027 Recovery Room

SYSTEM OF ACCOUNTS

4030	SURGICAL DAY CARE
4040	ANESTHESIOLOGY
4050	CENTRAL SERVICES AND SUPPLIES
4060	LABORATORIES - CLINICAL
4061	Hematology
4062	Microbiology
4063	Chemistry
4064	Immunology (Serology)
4065	Other
4070	LABORATORIES - PATHOLOGICAL
4071	Autopsy
4072	Surgical
4073	Cytology
4074	Other
4080	LABORATORIES - PULMONARY FUNCTION
4090	LABORATORIES - OTHER (SPECIFY)
4100	BLOOD BANK
4110	ELECTROCARDIOLOGY
4120	ELECTROMYOGRAPHY
4130	ELECTROENCEPHALOGRAPHY
4140	RADIOLOGY - DIAGNOSTIC
4141	Angiocardiography
4142	Other

SYSTEM OF ACCOUNTS

4150	RADIOLOGY - THERAPEUTIC
4151	Chemotherapy
4152	Radiation Therapy
4153	Other
4160	NUCLEAR MEDICINE
4161	Diagnostic
4162	Therapeutic
4170	PHARMACY
4180	INHALATION THERAPY
4190	DIALYSIS
4200	PHYSICAL THERAPY
4210	OCCUPATIONAL THERAPY
4220	OTHER PHYSICAL MEDICINE (SPECIFY)
4221	Speech
4222	Recreational
4223	Other
4230	EMERGENCY ROOM
4240	AMBULANCE
4250	PSYCHIATRIC EMERGENCY ROOMS
4260	CLINICS
4261	Admitting
4262	Diabetics

SYSTEM OF ACCOUNTS

4263	ENT
4264	Eye
4265	Obstetrics/Gynecology
4266	Orthopedic
4267	Pediatrics
4268	Surgery
4269	Cardiology
4271	Physical Medicine
4272	Urology
4400	HOME HEALTH SERVICES
4401	Visiting Nurses
4402	Other
4410	OTHER ANCILLARY SERVICES (SPECIFY)

Other Operating Revenue 2210.3

5020	TRANSFERS FROM RESTRICTED FUNDS FOR RESEARCH EXPENSES (SPECIFY)
5220	SCHOOL OF NURSING TUITION
5230	LICENSED VOCATIONAL NURSE PROGRAM TUITION
5240	MEDICAL POSTGRADUATE EDUCATION TUITION
5241	Interns
5242	Residents
5243	Other
5250	PARAMEDICAL EDUCATION
5260	STUDENT HOUSING
5270	OTHER EDUCATIONAL REVENUE
5280	TRANSFERS FROM RESTRICTED FUNDS FOR EDUCATION EXPENSES (SPECIFY)
5330	CAFETERIA
5350	LAUNDRY & LINEN
5380	EMPLOYEE HOUSING
5390	PHYSICIANS' OFFICES AND OTHER RENTALS
5400	OTHER RETAIL OPERATIONS
5420	PURCHASING SERVICES
5450	PARKING
5460	JANITORIAL AND MAINTENANCE SERVICES
5520	TELEPHONE & TELEGRAPH
5540	DATA PROCESSING SERVICES

5650	DONATED COMMODITIES
5660	CASH DISCOUNTS ON PURCHASES
5670	SALE OF SCRAP AND WASTE
5680	REBATES AND REFUNDS
5690	VENDING MACHINE COMMISSIONS
5700	MEDICAL RECORDS/ABSTRACT SALES
5710	OTHER COMMISSIONS
5720	TELEVISION/RADIO RENTALS
5730	NON-PATIENT ROOM RENTALS
5740	MANAGEMENT SERVICES
5750	OTHER OPERATING REVENUE (SPECIFY)
5800	TRANSFERS FROM RESTRICTED FUNDS FOR OTHER OPERATING EXPENSES (SPECIFY)

Deductions From Revenue 2210.4

5900	PROVISION FOR BAD DEBTS
5901	In-Patient
5902	Out-Patient
5903	Emergency
5910	CONTRACTUAL ADJUSTMENTS - MEDICARE
5920	CONTRACTUAL ADJUSTMENTS - MEDI-CAL
5930	CONTRACTUAL ADJUSTMENTS - BLUE CROSS
5940	CONTRACTUAL ADJUSTMENTS - OTHER

SYSTEM OF ACCOUNTS

5950	CHARITY DISCOUNTS
5960	RESTRICTED DONATIONS FOR INDIGENT CARE
5970	POLICY DISCOUNTS
5980	ADMINISTRATIVE ADJUSTMENTS
5990	OTHER DEDUCTIONS FROM REVENUE

SYSTEM OF ACCOUNTS

EXPENSE ACCOUNTS 2220

Daily Hospital Services Expense 2220.1

6010 MEDICAL/SURGICAL INTENSIVE CARE

6020 CORONARY CARE

6030 DEFINITIVE OBSERVATION

6040 PEDIATRIC INTENSIVE CARE

6041 Neonatal Intensive Care
6042 Medical Surgical Intensive Care
6043 Coronary Care
6044 Burn Care
6045 Other

6050 PSYCHIATRIC ISOLATION

6060 OTHER INTENSIVE CARE UNITS

6061
6062 Pulmonary
6063 Heart Transplant
6064 Burn Care
6065
6066 Other

6080 MEDICAL/SURGICAL ACUTE

6081 Medical
6082 Surgical

6120 PEDIATRIC ACUTE

6121 Medical/Surgical
6122 Neonatal
6123 Psychiatric
6124 Isolation
6125 Rehabilitation
6126 Other

6140 PSYCHIATRIC ACUTE

6160 OBSTETRICS ACUTE

6170 NURSERY ACUTE
6171 Premature

6172 Newborn

6173 Other Nursery Units

6180 OTHER ACUTE CARE UNITS

6181 Detoxification

6182 Communicable Disease

6183 Other

6200 SKILLED NURSING

6201 Rehabilitation

6202 Extended Care Facility

6240 PSYCHIATRIC - LONG-TERM

6280 INTERMEDIATE

6320 RESIDENTIAL

6360 OTHER DAILY HOSPITAL SERVICES (SPECIFY)

Ancillary Service Expense

2220.2

7010 LABOR AND DELIVERY

7020 SURGERY AND RECOVERY

7021 Surgery - General (Major)

7022 Surgery - Organ Transplants

7023 Surgery - Open Heart

7024 Surgery - Neurosurgery

7025 Surgery - Orthopedic

7026 Surgery - Minor

7027 Recovery Room

SYSTEM OF ACCOUNTS

7030	SURGICAL DAY CARE
7040	ANESTHESIOLOGY
7050	CENTRAL SERVICES AND SUPPLIES
7060	LABORATORIES - CLINICAL
7061	Hematology
7062	Microbiology
7063	Chemistry
7064	Immunology (Serology)
7065	Other
7070	LABORATORIES - PATHOLOGICAL
7071	Autopsy
7072	Surgical
7073	Cytology
7074	Other
7080	LABORATORIES - PULMONARY FUNCTION
7090	LABORATORIES - OTHER (SPECIFY)
7100	BLOOD BANK
7110	ELECTROCARDIOLOGY
7120	ELECTROMYOGRAPHY
7130	ELECTROENCEPHALOGRAPHY
7140	RADIOLOGY - DIAGNOSTIC
7141	Angiocardiography

7142	Other
7150	RADIOLOGY - THERAPEUTIC
7151	Chemotherapy
7152	Radiation Therapy
7153	Other
7160	NUCLEAR MEDICINE
7161	Diagnostic
7162	Therapeutic
7170	PHARMACY
7180	INHALATION THERAPY
7190	DIALYSIS
7200	PHYSICAL THERAPY
7210	OCCUPATIONAL THERAPY
7220	OTHER PHYSICAL MEDICINE (SPECIFY)
7221	Speech
7222	Recreational
7223	Other
7230	EMERGENCY ROOM
7240	AMBULANCE
7250	PSYCHIATRIC EMERGENCY ROOM
7260	CLINICS
7261	Admitting
7262	Diabetics

7263	ENT
7264	Eye
7265	Obstetrics/Gynecology
7266	Orthopedic
7267	Pediatrics
7268	Surgery
7269	Cardiology
7271	Physical Medicine
7272	Urology
7400	HOME HEALTH SERVICES
7401	Visiting Nurses
7402	Other
7410	OTHER ANCILLARY SERVICES (SPECIFY)

SYSTEM OF ACCOUNTS

Research Costs 2220.3

8010 RESEARCH ADMINISTRATIVE OFFICE

8020 RESEARCH PROJECTS

Education Costs 2220.4

8210 EDUCATION ADMINISTRATIVE OFFICE

8220 SCHOOL OF NURSING

8230 LICENSED VOCATIONAL NURSE PROGRAM

8240 MEDICAL POSTGRADUATE EDUCATION

8241 Interns

8242 Residents

8243 Other

8250 PARAMEDICAL EDUCATION

8260 STUDENT HOUSING

8270 OTHER EDUCATIONAL ACTIVITIES

General Services 2220.5

8310 PRINTING AND DUPLICATING

8320 KITCHEN

8330 CAFETERIA

8340 DIETARY

8350 LAUNDRY AND LINEN

8360 SOCIAL SERVICES

8370 CENTRAL TRANSPORTATION

8380 EMPLOYEE HOUSING

8390 PHYSICIANS' OFFICES AND OTHER RENTALS

8400 OTHER RETAIL OPERATIONS

8420 PURCHASING

8430 GROUNDS

8440 SECURITY

8450 PARKING

8460 HOUSEKEEPING

8470 PLANT OPERATIONS

8480 PLANT MAINTENANCE

8490 OTHER GENERAL SERVICES (SPECIFY)

Fiscal Services 2220.6

8510 GENERAL ACCOUNTING

8520 COMMUNICATIONS

8530 PATIENT ACCOUNTING

8540 DATA PROCESSING

8550 CREDIT AND COLLECTION

8560 ADMITTING

8570 OTHER FISCAL SERVICES (SPECIFY)

Administrative Services 2220.7

8610 HOSPITAL ADMINISTRATION

8620 GOVERNING BOARD EXPENSE

8630 PUBLIC RELATIONS

8640 MANAGEMENT ENGINEERING

8650 PERSONNEL

8660 EMPLOYEE MEDICAL SERVICES ADMINISTRATION

8670 AUXILLIARY GROUPS

8680 CHAPLAINCY SERVICES

8690 MEDICAL LIBRARY

8700 MEDICAL RECORDS

8710 MEDICAL STAFF

8720 NURSING ADMINISTRATION

8730 NURSING FLOAT PERSONNEL

8740 INSERVICE EDUCATION - NURSING

8750 OTHER ADMINISTRATIVE SERVICES (SPECIFY)

Unassigned Costs

8810 DEPRECIATION AND AMORTIZATION

8811 Building and Improvements

8812 Leasehold Improvements

8813 Fixed Equipment

8820 LEASES AND RENTALS

8821 Building and Improvements

8822 Leasehold Improvements

8823 Fixed Equipment

8830 INSURANCE - PROFESSIONAL LIABILITY

8840 INSURANCE - OTHER

8850 LICENSES AND TAXES (OTHER THAN ON INCOME)

8860 INTEREST - WORKING CAPITAL

8870 INTEREST - OTHER

8880 EMPLOYEE BENEFITS (NON-PAYROLL)

8890 OTHER UNASSIGNED COSTS (SPECIFY)

Non-Operating Revenue and Expenses 2220.9

9010 GAINS ON SALE OF HOSPITAL PROPERTY

9020 LOSSES ON SALE OF HOSPITAL PROPERTY

9030 MAINTENANCE OF RESTRICTED FUNDS

9040 UNRESTRICTED CONTRIBUTIONS

9050 DONATED SERVICES

9060 INCOME AND GAINS FROM UNRESTRICTED INVESTMENTS

9070 UNRESTRICTED INCOME FROM ENDOWMENT FUNDS

9080 UNRESTRICTED INCOME FROM OTHER RESTRICTED FUNDS

9090 TERM ENDOWMENT FUNDS BECOMING UNRESTRICTED

9100 TRANSFERS FROM RESTRICTED FUNDS FOR NON-OPERATING EXPENSES

9200 OTHER NON-OPERATING REVENUE

9300 OTHER NON-OPERATING EXPENSES

9400 PROVISION FOR INCOME TAXES

9401 Federal - current

9402 Federal - deferred

9403 State - current

9404 State - deferred

9500 EXTRAORDINARY ITEMS (SPECIFY)

SUBCLASSIFICATIONS OF PATIENT SERVICE REVENUE ACCOUNTS

DECIMAL POINT	Patient Classification (1)		Financial Status Classification (2)		Clinical Classification (3)		Accommodation Class (3)	
	Digit	Description	Digit	Description	Digit	Description	Digit	Description
.	0	Inpatient - Intensive and Acute Care	0	Self Pay	0	Medical	0	Private
.	1	Inpatient - Intermediate Care	1	Blue Cross	1	Surgical	1	Semiprivate
.	2	Inpatient - Skilled Nursing Care	2	Commercial Insurance	2	Pediatric	2	Private Ward
.	3	Inpatient - Other	3	Workmen's Compensation	3	Psychiatric	3	Ward
.	4	Outpatient - Emergency	4	Medicare	4	Obstetric/Gynecologic	4	Other
.	5	Outpatient - Referred	5	Medi-Cal	5	Newborn Nurseries	5	Other
.	6	Outpatient - Clinic	6	Governmental-County	6	Dental	6	Other
.	7	Home Health Care	7	Other	7	Podiatral	7	Other
.	8	Non-Patient	8	Other	8	Other	8	Other
.	9	Day care	9	Other	9	Other	9	Other

(1) Details of inpatient classifications (0-3) are required for different levels of licensed care. Outpatient classification detail (4-6) is not required; only total outpatient revenue in each revenue center is required. Other classifications are required, if appropriate.

(2) Classification optional if logs are maintained for Medicare and Medi-Cal charges. If no such logs are maintained, these two financial status classifications are required. Other financial status classifications are optional in all cases.

(3) Classification optional.

PATIENT CARE ASSETS AND CALCULATION OF COST OF CAPITAL

A. Identification of Patient Care Assets: Accounting Detail

B. Calculation of Cost of Capital

A. Identification of Patient Care Assets: Accounting Detail

Patient care assets are defined as those assets required to provide hospital services in a community. A full discussion of the subject is found in Section D in the text; described below are nonpatient care assets to be subtracted from total assets on the balance sheet to determine patient care assets. It is proposed that at this time assets be valued at historical acquisition costs to enable comparability with other industries. The Cost Accounting Standards Board is currently studying price level asset valuation. Eventual implementation will be consistent with general practice.

Table 1

Nonpatient Care Assets

(1) Marketable Securities CHAM Account Number 1020-1029

(2) Inventories

1086.00 Inventory - Research

1088.00 Inventory - Other

(3) Board-Designated Assets

\+ 1110-1119 Designated Cash

\+ 1120-1129 Board-Designated Marketable Securities

\+ 1130-1139 Board-Designated Other Assets

(4) Investments and Other Assets

1310-1319 Investment in Property, Plant and Equipment

1330-1339 Other Investments

1340-1349 Other Assets

+This is not a major item, but if a Board can designate an asset, then the income might not offset recognized expenses as it should.

A reasonable limit on total cash position will have to be established. Providers should not be encouraged to create large cash balances with the assurance of a return. Accounts 1015, 1016, and 1017 represent Income-Generating Accounts within the major grouping of Cash Accounts. Funds invested in this manner for more than six months are not includable in the patient care asset figure. Further, if the time period covered by such fund investment is interrupted by a number of withdrawals and redeposits so that the effect of such transactions is that funds are invested for more than six consecutive months, these invested funds are not included in net investment.

The California Hospital Accounting Manual does not provide specific account numbers for all the assets that should be deducted to arrive at patient care assets. Difficulty in identification exists with regard to the following nonpatient care assets:

(1) Internally-Generated Goodwill

Internally-Generated Goodwill is not included.

(2) Purchased Goodwill attributable to future earnings

(3) Cash Surrender Value of Life Insurance

(4) Prepaid Life Insurance Premiums

(5) Noncompetition Agreements

The California Hospital Accounting Manual does not include these; however, they should be treated in the same manner as Purchased Goodwill.

(6) Self-Insurance Reserve Fund

(7) Unrecovered Loss from Casualty which is entered on books of Provider as Deferred Charge

In addition to these accounts, the overriding concept that the dollar value of the asset must be reasonable has to be applied. If funds have been invested in a patient care related asset, but the provider has not received a license (where applicable) to provide the service, then the asset value would not be included in the investment figure.

By subtracting these assets, the remaining figure is total assets requisite for the provision of hospital services. With a return on assets incorporated into the rate structure, it becomes imperative that investments in assets do not proliferate beyond the demand parameters of a region. Obviously, then, a strong planning function is required.

The asset accounts not mentioned above are considered necessary in the operation of a hospital. (See Balance Sheet on Table 2, Pages 4 and 5 and Items 2100-2190.3 of CHAM for more detail.)

After subtracting the Nonpatient Care Assets from Total Assets, the Patient Care Asset (PCA) base can be calculated by:

PCA = Current Assets - Current Liabilities + Current Capital Indebtedness + Fixed Assets

BALANCE SHEET—UNRESTRICTED FUND
Table 2

Health Care Institution _____

ASSETS	Account Nos.	
CURRENT ASSETS	1010-1019	
Cash	1020-1029	
Marketable securities ($_____)*	1030-1039	
Accounts receivable	1040-1049	
Less estimated uncollectibles and allowances	1050-1059	
Receivable from third party payors for contract settlement	1060-1069	
Pledges receivable, net of estimated uncollectibles	1067	
Other receivables	1070-1079	
Due from restricted funds	1080-1089	
Inventories, at lower of cost or market	1040-1098	
Prepaid expenses	1099	
Other current assets		
TOTAL CURRENT ASSETS		
BOARD DESIGNATED ASSETS	1110-1119	
Cash	1120-1129	
Marketable securities ($_____)*	1131, 1132	
Pledges receivable, net of estimated uncollectible	1133	
Investment in land	1134	
Other investments	1135	
Other board designated assets		
TOTAL BOARD DESIGNATED ASSETS		
PROPERTY, PLANT, AND EQUIPMENT — AT COST	1200-1209	
Land	1210-1219	
Land improvements	1220-1229	
Buildings and improvements	1230-1239	
Leasehold improvements	1240-1249	
Equipment		
TOTAL PROPERTY, PLANT, AND EQUIPMENT	1260-1279	
Less accumulated depreciation and amortization		
NET TOTAL PROPERTY, PLANT, AND EQUIPMENT	1250-1259	
Construction in progress (Cost to complete $_____)		
INVESTMENTS AND OTHER ASSETS	1310-1319	
Investments in real estate, net of $_____ accumulated depreciation CY / $_____	1320-1329	
Other investments ($_____)*	1330-1339	
Other assets	1340-1349	
TOTAL INVESTMENTS AND OTHER ASSETS		
INTANGIBLE ASSETS	1350-1359	
Goodwill	1360-1369	
Unamortized loan costs	1370-1379	
Preopening and other organization costs	1378-1389	
Other intangible assets		
TOTAL INTANGIBLE ASSETS		
TOTAL ASSETS		

*Include Current Market Value in Parenthesis.

Table 2 (cont.)

State Facility No. _____

Line No	LIABILITIES AND EQUITY (Fund Balance)	Account Numbers		Line No
01	CURRENT LIABILITIES			01
02	Notes payable	2010-2019		02
03	Accounts payable	2020-2029		03
04	Accrued compensation and related liabilities	2030-2039		04
05	Other accrued expenses	2040-2049		05
06	Advances from third party payors	2050-2059		06
07	Payable to third party payors for contract settlement	2060-2069		07
08	Due to restricted funds	2070-2079		08
09	Income taxes payable	2080-2089		09
10	Current maturities of long term debt			10
11	Other liabilities	2090-2099		11
12	TOTAL CURRENT LIABILITIES			12
13				13
14	DEFERRED CREDITS			14
15	Deferred income taxes	2110-2119		15
16	Deferred third party income	2120-2929		16
17	Other deferred credits	2130-2139		17
18	TOTAL DEFERRED CREDITS			18
19				19
20				20
21	LONG TERM DEBT — Due Date — Interest Rate — Unpaid Principal			21
22				22
23	Mortgage notes $	2210-2219		23
24	Construction loans	2220-2229		24
25	Notes under revolving credit	2230-2239		25
26	Capitalized lease obligation	2240-2249		26
27	Bonds payable	2250-2259		27
28	Other indebtedness	2260-2279		28
29	TOTAL LONG-TERM DEBT See notes 1 and 2 on page			29
30	Less amount shown as current maturities			30
31	NET LONG-TERM DEBT			31
32	TOTAL LIABILITIES			32
33				33
34	EQUITY (non profit)			34
35	Unrestricted Fund Balance	2310-2399		35
36				36
37	EQUITY (Investor Owned)			37
38	Preferred stock (par value $ _____ per share, authorized			38
39	_____ shares, outstanding _____ shares)	2310		39
40	Common stock (par value $ _____ per share, authorized			40
41	_____ shares, outstanding _____ shares)	2320		41
42	Additional paid-in capital	2330		42
43				43
44	Retained earnings (capital account for partnership or sole proprietorship)	2340		44
45		2350		45
46	Less Treasury stock (_____ shares)			46
47	TOTAL EQUITY			47
48				48
49	TOTAL LIABILITIES AND EQUITY			49

CHC 7041 a-1 14-75)

B. Calculation of Cost of Capital (C_C)

The proposed method of calculating Capital Costs requires that a rate of return, to be multiplied times total patient care assets, be derived. The equation for determining Capital Costs (C_C) is:

$$C_C = P_D C_B + P_E C_E$$
$$P_D + P_E = 1$$

Where:

C_C = Capital Cost
C_B = Cost of Borrowing
C_E = Cost of Equity
P_D = Proportion Debt
P_E = Proportion Equity

The costs of borrowing was defined to be California hospital industry specific (rather than using a national indicator of interest rates as proxy). The cost of equity was defined to be a rate of return comparable to the return on equally risky securities but not restricted to the health industry. For this example, C_B was calculated by dividing interest payments from the income statement by current and long-term Capital Indebtedness from the balance sheet for the same fiscal year. The cost of equity, for illustrative purposes

only, was assumed to be 9.37 percent. Income statements and balance sheets from five hospitals provided the basic information summarized in Table 3. This information is transformed into an aggregate Cost of Capital (C_C) and Standard Margin (SM) below:

$$(P_D)(C_B) + (P_E)(C_E) = C_C$$

$$(.459)(5.3) + (.541)(9.37) = 7.50$$

$$C_C \times PCA = SM$$

$$7.5\% \times \$29,245,255 = 2,193,394,$$

where PCA stands for Patient Care Assets.

Three separate methods of calculating the individual hospital capital cost values are described below. Although confusion results from the three methods, they are presented because of the significant dollar fluctuations between hospitals. The first method is preferred; however, it is less sensitive to the current financing structures and methods. Method Three places a greater importance on current financing structures. Method Two is the least sensitive to the individual hospital.

The three methods to calculate capital costs are illustrated in Table 4:

(1) Method One calculates a cost of capital using the average cost of borrowing in the industry and the standard cost of equity (assumed for exhibit purposes to be 9.37) weighted by the individual hospital's proportion of debt to equity.

(2) Method Two assumes one standard cost of capital that is calculated using the average industry interest rate and industry proportion of debt to equity.

(3) Method Three uses the individual hospital's cost of borrowing and the individual proportion of debt to equity. This method is the least desirable in the long run because there are no incentives to seek optimal financing mechanisms; however, it considers current financing structures and could be used as a phase-in procedure.

Although three methods for determining the capital costs are illustrated, the differences are only with respect to the individual hospitals. The total capital costs for the industry remain the same.

The individual hospital differences, however, are very significant. With a high C_E/C_B ratio (rate of return on equity to interest rate), the incentive is to maximize the amount of equity, especially with Methods One and Three. The objective for hospital administrators is to lower the actual interest expense by having fewer loans. Reducing interest expense would increase a hospital's net income and place it in less vulnerable cash flow position.

Another method for reducing the actual interest rate would be to reduce current assets such as inventories or receivables and retire debt with the cash flow (thus reducing working capital needs).

Tables 3 and 4 illustrate the asset and debt structure positions of five hospitals and the calculation of C_B, C_E and C_C. Table 4 illustrates the impact of the three methods used in calculating these rates. Tables 5-8 present rate of return data. Note that total capital costs for the five hospitals (industry) remain constant but the distribution among hospitals changes.

Impact of Capital Cost Concept

The Capital Cost concept has been designed to provide an equitable and uniform mechanism for determining hospital capital costs. The mechanism is not intended to be capable of accommodating all hospitals. Rather, when coordinated with the screening process and an exception procedure, it should provide a workable system.

By defining the patient care asset base as Working Capital plus Current Maturities of Capital Indebtedness plus Fixed Assets, many distortions are removed from the process. Hospitals are typically concerned with meeting working capital needs and with accommodating the differing debt structures and ages of institutions. Projected changes in working capital are automatically incorporated in determining the asset base.

Table 3

BASIC BALANCE SHEET AND INCOME STATEMENT INFORMATION

		Working Capital	Current Capital Debts	Long-term Patient Care Assets	Total Patient Care Assets
Hospital	1	2,553,245	0	9,586,575	12,139,820
	2	85,788	15,355	1,135,425	1,236,568
	3	376,527	52,315	2,070,902	2,499,744
	4	111,159	318,295	3,471,286	3,900,740
	5	677,667	154,513	8,636,203	9,468,383
Industry	6	3,804,386	540,478	24,900,391	29,245,255

		Equity + Capital Indebt.	Long-term Assets	Nonpatient Care Assets	Patient Care Assets	P_D [1]	P_E [2]	Interest Rate %
Hospital	1	15,884,563	13,331,318	3,744,743	9,586,575	0	1.00	0
	2	1,283,889	1,198,101	62,676	1,135,425	.125	.875	9.5
	3	2,613,427	2,184,584	113,682	2,070,902	1.139	(.139)	3.4
	4	3,667,047	3,471,286	-0-	3,471,286	.607	.393	6.2
	5	10,217,002	9,725,822	1,089,619	8,636,203	.989	.011	5.6
Industry	6	33,665,928	29,911,111	5,010,720	24,900,391	.459	.541	5.3

		Current Assets	Fixed Assets	Total Assets	Current Liabilities	Current Capital Indebt.	Long-term Liabilities	Capital Indebt.	Equity	Interest Expense
Hospital	1	4,255,375	13,331,318	17,586,693	1,702,130	0	0	0	15,884,563	0
	2	171,575	1,198,101	1,369,676	85,787	15,355	145,351	160,706	1,123,183	15,267
	3	690,300	2,184,584	2,874,884	313,773	52,315	2,925,032	2,977,347	(363,920)	102,584
	4	2,193,290	3,471,286	5,664,576	2,082,131	318,295	1,909,231	2,227,526	1,439,521	137,769
	5	2,964,963	9,725,822	12,690,785	2,287,296	154,513	9,945,487	10,100,000	117,002	570,614
Industry	6	10,275,503	29,911,111	40,186,614	6,471,117	540,478	14,925,101	15,465,579	18,200,349	826,234

[1] Proportion Debt

[2] Proportion Equity

*Due to rounding errors, columns and rows may not total.

Table 4

CALCULATIONS OF COST OF CAPITAL AND STANDARD MARGIN

HOSPITAL	1 METHOD	2 C_C	3 C_B	4 C_E	5 STANDARD MARGIN	6 INTEREST (PATIENT CARE)	7 SM-INT. 5-6	8 RETURN ON TOT. EQUITY	9 RETURN[2] ASSETS
(1)	1	9.37	5.30	9.37	1,137,501	0	1,137,501	7.2%	8.2%
	2	7.50	0	7.50	910,487	0	910,487	5.7%	6.6%
	3	9.37	0	9.37	1,137,501	0	1,137,501	7.2%	8.2%
(2)	1	8.86	5.30	9.37	109,560	14,568	94,992	8.5%	7.3%
	2	7.50	9.50	7.21	92,743	14,568	78,175	7.0%	6.0%
	3	9.39	9.50	9.57	116,114	14,568	101,546	9.0%	7.8%
(3)	1	4.73	5.30	9.37	118,238	98,528	19,710	--	.7%
	2	7.50	3.40	(26.10)	187,481	98,528	88,953	--	3.2%
	3	3.40[1]	3.40	9.37	84,991	98,528	(13,537)	--	(.5)%
(4)	1	6.90	5.30	9.37	269,151	137,769	131,382	9.1%	2.3%
	2	7.50	6.20	9.51	292,556	137,769	154,787	10.8%	2.7%
	3	7.84	6.20	9.37	305,818	137,769	168,049	11.7%	3.0%
(5)	1	5.34	5.30	9.37	505,612	521,622	(16,010)	(13.7)%	(.1)%
	2	7.50	5.60	178.33	710,129	521,622	188,507	161.1%	1.6%
	3	5.64	5.60	9.37	534,017	521,622	12,395	10.6%	.1%
(6) INDUSTRY	1	7.50	5.30	9.37	2,193,941	723,214	1,470,727	8.1%	4.2%
	2	7.50	5.30	9.37	2,193,941	723,214	1,470,727	8.1%	4.2%
	3	7.50	5.30	9.37	2,193,941	723,214	1,470,727	8.1%	4.2%

[1] $C_C = C_B$ since the hospital had negative equity.

[2] Equals Total Assets minus Nonpatient Care Assets (short-term liabilities are not subtracted). Return equals Net Income after Interest but before Charity, Taxes, Dividends etc.

To be sensitive to existing debt structure, three calculating methods are presented in Table 5. Each of the three methods exhibits a different level of sensitivity to debt structures. Method Two is the theoretically preferred and simply states that there is a fixed rate of return on patient care assets. The result is that Returns on Equity (Table 5) fluctuate between 0% to 161.1%. As Returns on Assets vary from 1.6% to 6.6% (the short-term liabilities are not subtracted from assets). However, the Returns on the Patient Care Asset Base (which excludes short-term liabilities) are constant at 7.5%.

Methods One and Three are quite similar. Method One places a greater reward on equity financing than does Method Three. Since equity financing exposes the hospital to less financial risk and in the long run can lead toward lower total costs, Method One is preferred to Method Three. The incentive will only exist if the projected cost of equity is above the projected cost of debt. Additional refinement of the concept will be needed to get the variances within acceptable and equitable ranges.

RANGE FLUCTUATION

Table 5

	Return On Equity	Return On Assets[1]	Return on Patient Care Assets Base
METHOD 1			
High	9.1%	8.2%	9.37%
Low	(13.7)%	(.1)%	4.73%
Range	22.8%	8.3	4.64
METHOD 2			
High	161.1%	6.6%	7.50%
Low	0	1.6%	7.50%
Range	161.1	5.0	0
METHOD 3			
High	10.6%	8.2%	9.39%
Low	0	(.5)%	3.40%
Range	10.6	8.7	5.99

[1]Assets equals total hospital assets (short-term liabilities are not subtracted) minus nonpatient care assets.

RATE OF RETURN

METHOD 1

Table 6

Hospital	Return On Equity	Return On Assets[1]	Return On Patient Care Assets Base
1	7.2%	8.2%	9.37%
2	8.5%	7.3%	8.86%
3	-	.7%	4.73%
4	9.1%	2.3%	6.90%
5	(13.7)%	(.1)%	5.34%
Industry	8.1%	4.2%	7.50%

[1]Assets equals total hospital assets (short-term liabilities are not subtracted) minus nonpatient care assets.

RATE OF RETURN

METHOD 2

Table 7

Hospital	Return On Equity	Return On Assets[1]	Return On Patient Care Assets Base
1	5.7%	6.6%	7.50%
2	7.0%	6.0%	7.50%
3	-	3.2%	7.50%
4	10.8%	2.7%	7.50%
5	161.1%	1.6%	7.50%
Industry	8.1%	4.2%	7.50%

[1]Assets equals total hospital assets (short-term liabilities are not substracted) minus nonpatient care assets.

RATE OF RETURN

METHOD 3

Table 8

Hospital	Return On Equity	Return On Assets[1]	Return On Patient Care Assets Base
1	7.2%	8.2%	9.37%
2	9.0%	7.8%	9.39%
3	-	(.5)%	3.40%
4	11.7%	3.0%	7.84%
5	10.6%	.1%	5.64%
Industry	8.1%	4.2%	7.50%

[1]Assets equals total hospital assets (short-term liabilities are not substracted) minus nonpatient care assets.

MULTIPLE RATE SYSTEM

A. Summary

B. Introduction

1. A La Carte Versus Inclusive Rate: A Quick Comparison

C. The Multiple Rate System

1. Function of Multiple Rate System

MULTIPLE RATE SYSTEM (MRS)

A. Summary

This appendix outlines possible inclusive rate categories. The Multiple Rate System (MRS) categories follow service-related clusters in which ancillary service costs are allocated to the major rates. The allocation of ancillary units of service to the MRS groupings provides an average profile of the services provided typical patients.

The Multiple Rate System was designed to provide a statistical infrastructure for cost accounting and budgeting functions. The system is structured to be keyed by volume of activity statistics. This statistical foundation supports two primary functions. The first deals with input-output relationships to aid in the accounting and budgeting processes. The second is that MRS provides a possible unit of payment system. In either case the aim is to provide uniform data for external review rather than to control internal management.

The Multiple Rate System lies between the all-inclusive and a la carte systems. The multiple rate structure recognizes the different categories of general hospital service. The detail and number of rates represent greater charge distinction reflective of diagnosis and patient type than does the present system which emphasizes individual services. The system departs from conventional charges in the allocation of ancillary units of service (and associated expenses) to inpatient clusters.

Depending on the scope of service offered by a hospital, 20 to 40 inclusive rates could apply to a particular hospital.

To apply MRS, the Statistical Breakdown form (Pages 34-35), which accumulates relative value units of service of ancillary services by MRS category, will have to be implemented. The ancillary service utilization profile developed from these statistics will assist in understanding the impact on ancillary service utilization of changes in patient mix or services provided. These supplemental statistical data are designed to be used with California Hospital Accounting Manual cost data.

The potential advantages of MRS could be:

(1) Operating Cost Savings
- decrease in billing department expenses;
- shorter receivables period;
- fewer lost charge slips; and
- simplification of billing procedure.

(2) Operating Information
- monitors the use of ancillary services by patient type;
- monitors total costs (and revenue) by patient type;
- provides a basis for budgeting of expenses and units of service; and
- provides a basis for a functional (rather than departmental) cost accounting system.

(3) Regulatory Function
- provides consistency for fair and equitable comparison;
- compatible with P.L. 93-641, Section 1533d; and
- basis for planning expansion and contraction of facilities and services.

(4) Control (if used as a unit of payment)

- provides a financial incentive to control use of services; and
- coordinates rate regulation with licensing regulation.

The emphasis and direction of MRS are toward (3) and (4), regulation and control.

B. Introduction

This appendix describes the preliminary investigation into establishing a Multiple Rate System (MRS) for accumulating hospital costs into functional patient accounts. An initial methodology utilizing data from the CHFC Disclosure forms and supplemental statistical data is presented. Further study to refine the patient care categories and standardize statistical units would be required prior to implementation.

When hospitals started charging for providing medical care, a single inclusive per diem was adequate. The nature of hospital care and medical sophistication did not require the specialized ancillary services now provided. Hospitals modified the method of billing to more accurately reflect the level and intensity of care provided individual patients. Thus, the itemized charge system of individual departments and services developed.

This a la carte system of charging had the advantage of itemizing a patient's bill to coincide with hospital departments. As hospitals became more complex, so did the services and charge systems. The current hospital bill is a long list of

charges for individual items and, some argue, reflects the costs incurred by the hospital for providing care to a specific patient.

The Multiple Rate System structure has been designed to alter the bias of the patient bill. The perceived bias is that an itemized bill reflects hospital financial data, not patient medical information. The Multiple Rate System outlines a patient accounting system that attempts to merge the predominantly financial information of the itemized charge with medical information. The Multiple Rate System attempts to aggregate patient care categories and derive the associated costs related to providing care to specific patient populations. Consequently, MRS serves two independent functions: (1) merging financial and medical information; and (2) as a unit of payment. Because of existing statistical and implementation problems, it is not recommended that MRS be used as a unit of payment at this time. Continuing research efforts should focus on merging financial and medical data and streamlining cumbersome itemized charge schedules.

1. A La Carte Versus Inclusive Rate: A Quick Comparison

Traditionally, hospital rates have been either itemized or inclusive. Before outlining the details of MRS, an update and interpretation of the current situation is presented.

A la carte proponents state that to present a fair and accurate bill to the patient, each charge should be matched to a specific service received. With this system, patient charges

would not be gross averages or reflect cross subsidization of costly services. A common analogy is that of purchasing food in a supermarket. A la carte would state that a shopper should pay for each item, as is currently done. Inclusive rate would suggest that the shopper pay a fixed, predetermined amount and take whatever is needed. The consequences are obvious: overconsumption and utilization, increased operating costs, and a decrease in quality to equate revenue with expenses.

The inclusive rate proponents maintain that costs savings can be achieved by streamlining the current billing system. Hospitals are not supermarkets and the analogy just does not hold. More importantly, hospitals devote costly resources to nonmedical activities--billing patients, tracing lab charges, lost lab slips and cost accounting in a system that is highly inefficient. The internal advantages to be gained by changing the billing structure are:

(1) decrease in billing department expenses;

(2) shorter receivables period;

(3) fewer lost charge slips; and

(4) simplification of billing procedure.

Studies by the Boston Consulting Group and Ernst & Ernst illustrate potential benefits.[1]

The possible range of alternatives and compromises between the theoretical poles offers better solutions for dealing with the current situation than do the theoretical models. While

---

[1]"Inclusive Rate Survey Findings, Conceptual System Design, and Conversion Plan for the Los Angeles County Department of Hospitals," Contract Number 110-71-287, Department of Health, Education, and Welfare.

both the a la carte and inclusive rate arguments have merit, they do not accurately incorporate the practical realities of the hospital business. To begin with, hospitals are not supermarkets and medical care is not the same as a box of cornflakes. The hospital consumer (patient) is very often neither the direct decision maker with respect to the use of services nor the negotiator of a price. The patient does not engage in an arm's-length transaction with either the hospital or the physician, but usually follows his physician's advice. Because of enormous complexities, present detailed a la carte charge systems already have significant dollar amounts of a hospital's expenses aggregated and averaged into patient charges. Current managerial accounting systems on the average are inadequate as accurate cost/price information systems needed to support itemized charge structures. Calling the prevailing system an accurate "charge for service" ignores prevailing averaging procedures.

Equally, the unique all-inclusive rate has serious drawbacks as a unit of payment. Certain cost savings appear to be realizable as claimed with the average rate philosophy. Questions of increased utilization, extended length of stay to benefit hospitals, and increased ancillary services used at the detriment of hospital finances go unanswered. An inclusive rate system will require additional mechanisms to moderate the deleterious incentives to cut quality which are built into the inclusive per diem payment mechanism. Fundamental to the inclusive rate is the notion of cross-subsidization of medical services. The averaging process drastically reduces and distorts the cost of

infrequent and resource-intensive medical services. Cross-subsidization of costly medical services is a social issue with public policy as well as financial implications. Hospitals that do provide complex and expensive procedures are reluctant to charge "full cost" for these procedures to generate sufficient revenue. To cover their total costs, these hospitals spread certain costs over all patients instead of using a direct costing method. One dramatic financial implication is the development of the "surgicenter" and its practice of providing only those services that have costs below charges for similar procedures in the hospital sector.

The implementability and equity implications among hospital charge payers are often skirted in the theoretical inclusive rate proposals. Cost accounting, volume statistics, capacity levels, patient mix, scope and frequency of services offered, and geographic area are all variables necessary to making rate determination more than just an aggregation of expenses divided by patient days. The data processing requirements for such a task could be extremely large. The sophistication of the managerial accounting system would need to be far greater than the current state-of-the-art. The implementation period of an inclusive rate system could be long and complex. The equity question in patient bills has two levels: (1) should the bill represent charges for services rendered; and/or (2) must "equity" among the different payers (Title XVIII, Title XIX, Blue Cross, Blue Shield, commercial insurance and self-insurers) be maintained? The bill representing costs for services provided is a minor issue since present a la carte bills do not as a rule represent

costs. Equity among payers cannot be achieved without cost-related pricing.

Rather than assume the optimum situation with regard to the payment mechanism and design the system from there, it is preferable to design for the present situation incorporating sufficient flexibility for the most likely future developments in the payment mechanism. Currently many payers exist in the medical care marketplace. To a large extent the nongovernmental payers act as intermediary clearinghouses, without exercising the economic clout of purchasing power. Increased expenses are routinely passed along to the premium payer and the taxing system. The inclusive rate, however, works best with one payer and worst with many payers. The myriad of insurance and payment plans currently in existence raises serious questions about the implementability of an inclusive rate as a unit of payment without a major overhaul of health insurance plans.

The fundamental difference between itemized charge and inclusive charge mechanisms comes down to the control or lack of control over use of services and subsequently the cost of patient care. Obviously, the payment mechanism must operate in conjunction with planning, utilization review, licensing and certificate of need. With an itemized charge payment system, neither the hospital nor the physician has an incentive to control use of patient days or ancillary services once the patient is in the hospital; in fact, there are financial incentives to increase use of patient care services. A prospectively contracted

inclusive rate requires that control over use of services be established. Since the hospital is put at risk in this type of system, it should control utilization patterns in order to live within the constraints established by the prospectively contracted rates.

Simply, the inclusive rate requires control over utilization. And, since the hospital faces the financial consequences of overutilization, it should control utilization. The question of whether hospitals can, or even should, control physicians goes unanswered.

The above discussion examines a la carte and inclusive rates from the position of the hospital. However, hospitals are not alone in the health delivery environment. Health planners, rate regulators, governmental agencies, physicians, third-party payers and patients are all part of the system. The Multiple Rate System structure was not designed as the best system for internal management of hospitals. Rather, it reflects a compromise position to accommodate the many participants in the health delivery environment, and is directed specifically toward the regulatory process. The Multiple Rate System is designed to:

(1) provide "rates" for rate review;

(2) facilitate comparisons among hospitals and services;

(3) link economic regulation to licensing; and

(4) provide a mechanism to "cost out" programs for planning purposes.

C. The Multiple Rate System

The present system of a la carte charges is much closer to an inclusive rate system than is readily apparent. Rather than representing a radical departure, the Multiple Rate System is more detailed in some aspects, and in others more inclusive, than the present system of a la carte charges. A primary objective of MRS is to merge financial cost data with patient medical information.

The rate system proposed here lies between the all-inclusive and a la carte systems. The multiple rate structure recognizes the different categories of general hospital services. The detail and number of rates represent greater charge distinction reflective of diagnosis and patient type than does the present system which emphasizes individual services. (See Page 17 for a list of rates.) The system departs from conventional cost accounting in the allocation of ancillary units of service (and associated expenses) to patient clusters. Because of this departure the rates are predominantly inclusive in nature and demand utilization control as described above. In addition, five separate patient visit rate codes developed for outpatient and clinic services have been included. Depending on the size of the hospital and scope of services, between 20 and 40 per diem rates keyed to day of stay and length of stay will be employed. The rate categories were selected to be compatible with State licensing regulations. During the budget screening process, hospitals will submit projected costs grouped by MRS category for their licensed services.

The Multiple Rate System (MRS) is designed to provide sufficient flexibility to accommodate large and small hospitals with different case mixes. The cost accounting system that supports the MRS will be capable of providing the necessary expense and statistical data to support either this inclusive rate system, itemized charges or budget comparisons. The 16 core rate categories are listed beginning on Page 17. On the following pages, the specific California Hospital Accounting Manual (CHAM) Chart of Account numbers for direct revenue and expense are matched to specific rates. (CHAM numbers are defined in Appendix D.)

The major difference between MRS and an all-inclusive rate is the allocation of expenses by type of patient. The Multiple Rate System represents a possible first step in establishing a charge by diagnosis system. Specific rates, like Obstetrics and Open Heart Surgery, could actually be a rate per diagnosis.

1. Function of the Multiple Rate System

The Multiple Rate System was designed to provide a statistical infrastructure for cost accounting and budgeting functions. The system is structured to be keyed to statistical variables (e.g., units of service, patient days, visits) rather than dollar values. The reason for this is that dollar values are subject to numerous exogenous influences from year to year and place to place (e.g., inflation, local market conditions). Volume statistics, however, appear to be a function of the health care environment (population, physicians, hospitals, insurance programs, and so on). By using the volume statistics, price and cost behavior for different services, segregated between fixed and variable, can be derived.

The statistical foundation of MRS supports two primary functions. The first deals with input-output relationships to aid in the budgeting process. The second, and less important, is that MRS provides a possible unit of payment system.

The allocation of ancillary units of service to the MRS groupings yields an average profile of the services provided typical patients. For example, the MRS grouping for obstetrics patients would accumulate the total units of service provided obstetrics patients per day. For purposes of illustration assume that 1.5 units of laboratory service were provided per obstetrics patient day. In addition to the cost allocation (described in Appendix G), some powerful predictive information is produced. If for the following year a ten percent increase in obstetrics patient days was projected, one could assume that the laboratory would have to budget for the increase due to the increase in obstetrics patient days. In this way the impact of a change in patient mix on the demand for units of service from ancillary departments can be projected. If a hospital were closing down its obstetrics service, the impact on the total hospital operations could also be projected in relation to lost units of service by ancillary departments. By accumulating cost data into the MRS groupings, year-to-year comparisons can be made for changes in utilization and changes in costs within the hospital.

Because costs can be accumulated into the MRS groupings, a natural conclusion would be that the MRS unit could be the unit of payment. While possible, this conclusion is not required.

Conventional itemized charge systems or a modification to MRS to have rates for laboratory and radiology could prove workable, would be easier to implement and would meet less resistance from hospitals and insurance carriers. While it is possible to have an itemized charge billing system incorporated into MRS, the control over utilization aspects of an inclusive rate (discussed on Page 8), the coordination with licensing, the comparability of program costs across hospitals, and the goal of directly relating charges to costs could be defeated. However, utilization control can be maintained by other mechanisms such as strong utilization review, medical record audits, peer review, management pressure and financial incentive. Thus, the prospective rates are not bound to be inclusive if equally effective alternative control mechanisms are put into operation. The combination of a streamlined billing system (perhaps billing for RVUs) and MRS pricing model could provide a mix of incentives that controls utilization and maintains quality within the managerial jurisdiction of the hospital administrator. However, the linking of the rate and licensing regulatory processes is lost if MRS is not the payment unit.

Within the context of PIPE the most important function of MRS is as a regulatory mechanism. While certain internal management advantages spin off from the system, the greatest beneficiary is the regulatory process. By providing a uniform format for the accumulation of expenses, revenues and utilization statistics, a better understanding from the regulatory point of view will develop. Coupled with a screening procedure,

MRS can provide a means of objective regulation of costs and utilization of services through the following:

(1) provision of a uniform and consistent procedure for fair and equitable hospital comparison on an expense and statistical basis;

(2) compatibility with P.L. 93-641, Section 1533d (inclusive rates by patient categories);

(3) provision of a statistical and cost base for sound planning of the expansion or contraction of facilities or services in a community and health service area related to medical needs;

(4) provision of a control mechanism by way of financial risk for the use of ancillary services; and

(5) coordination of rates with licensing standards, thus enhancing the effectiveness of both programs in addition to relieving hospitals of inconsistency in Titles XVIII and XIX where level of service and level of payment often diverge.

In addition it must be emphasized that for rate review purposes, the current myriad of a la carte charges creates unmanageable problems (such as reviewing a la carte charges, relating these charges to budgeted revenue, and analyzing variances at the end of the period).

Pages 17 and 18 provide an outline of the 16 core-service clusters of the Multiple Rate System. Pages 19-27 provide the detail of Revenue and Expense accounts from the California Hospital Accounting Manual for each MRS cluster. Pages 28-31 provide a summary of the rate system.

The Multiple Rate System is based on the following data inputs (see Pages 32-39). Two versions of each will be required. The first would be historical actuals and the second would be projections for the budget year.[2]

(1) PIPE Form B--Statistical Breakdown. This form provides the necessary statistical basis for the allocation of ancillary service expense to the appropriate rate areas. (See Table 4.2 below.)

(2) CHFC 7041 h-5 (4-75), Page 4: Statistical Recap.

(3) CHFC 7041 g-1 (4-75), Page 19: Cost Allocation: Statistical Basis.

(4) CHFC 7041 f-1 (4-75), Page 20: Cost Allocation.

(5) CHFC 7041 h-6 (4-75), Page 21a: Detail Direct Payroll Costs, Patient Revenue Producing Centers.

(6) CHFC 7041 h-7 (4-75), Page 22a: Detail of Direct Payroll Costs, Nonrevenue Producing Centers.

(7) CHFC 7041 d-8 (4-75), Page 17: Trial Balance Worksheet and Supplemental Expense Information, Revenue Producing Centers.

(8) CHFC 7041 d-9 (4-75), Page 18: Trial Balance Worksheet and Supplemental Expense Information, Nonrevenue Producing Centers.

(9) CHFC 7041 a-1 (4-75), Page 5: Balance Sheet: Unrestricted Funds.

---

[2]Unless otherwise indicated, page numbers below refer to the California Hospital Accounting Manual.

(10) CHFC 7041 b-1 (4-75), Page 6: Balance Sheet: Restricted Funds.

(11) PIPE C: Computation of Average Equity Capital.

(12) PIPE A: Rate Formulation Summary Sheet.

(13) PIPE D: Expense Data by Rate Center.

(14) PIPE E: Rate Formulation by Rate Center.

PIPE Forms are provided on Pages 32-39. Their use and completion are discussed in detail in Appendix H, "Budgeting."

Table 1

OUTLINE OF MULTIPLE RATE SYSTEM (MRS) SERVICE CLUSTERS

These service clusters will require additional refinement and definition in subsequent research.

I. Intensive Care Units (ICU)

At most, three rates will be used to reimburse for ICU Services. The rate levels will be a function of intensity of hospital resources devoted to running the specific ICU. Depending on the hospital, then, the 12 ICUs will be clustered. Some hospitals will have three rates, some one and others none.

II. Sub-acute Hospitalization

Most hospitals will not provide all of these services. A sliding rate: higher for the first days of service will be applied if possible.

III. Obstetrics

Two rates are planned: C2 being all deliveries and inpatient abortions; C1 being all remaining obstetrics services.

IV. Acute Care: Psychiatric

As in Service II, a sliding rate is planned.

V. Acute Care: Pediatric

This rate should not exist since pediatric patients are separated because of age, not diagnosis.

VI. Acute Care: Medical

VII. Acute Care: Surgical

A relative value scale should be developed to handle the different types of surgery with respect to hospital resources, not physician time. If necessary, special rates for special surgeries should be developed.

VIII. Acute Care: Nursery

IX. Special High Technology, High Cost Equipment

These special rates only to come with special license permits.

X. Clinic: Psychiatric

XI. Clinic: Dental

No expense accounts are devoted to these clinics. However, these clinics will probably exhibit significantly different cost behavior from the other clinics. Additional clinic rates can be developed as needed.

XII. Clinic: Other

XIII. Surgical Day Care

A relative value scale, similar to the surgery scale, should be developed.

XIV. Radiation Therapy

XV. Emergency Room

Two levels depending on types of ER available.

XVI. Education Premium

Special rates within the above categories will exist for special services. Only if a hospital is licensed to provide special services will it be eligible for the special rates. Rate categories will be compatible with licensing regulations.

Table 2

Detail of Revenue and Expense Accounts from California Hospital Accounting Manual for Each MRS Service Category. The four-digit number preceding the service names are from the CHAM System of Accounts.

SERVICE: I - Intensive Care
RATES: A1, A2, A3
DIRECT REVENUE ACCOUNTS:

3010 Medical/Surgical ICU
3020 Coronary Care
3030 Definitive Observation
3040 Pediatric ICU

3041 Neonatal ICU
3042 Medical/Surgical ICU
3043 Coronary ICU
3044 Burn Care
3045 Other

3050 Psychiatric Isolation

3062 Pulmonary ICU
3063 Heart Transplant
3064 Burn Care

DIRECT EXPENSE ACCOUNTS:

6010 Medical/Surgical ICU
6020 Coronary ICU
6030 Definitive Observation
6040 Pediatric ICU

6041 Neonatal ICU
6042 Medical/Surgical ICU
6043 Coronary ICU
6044 Burn ICU
6045 Other

6050 Psychiatric Isolation

6062 Pulmonary ICU
6063 Heart Transplant
6064 Burn Care

INDIRECT EXPENSE ACCOUNTS:

(1) Allocation Ancillary Services

(2) Allocation of:

(a) Unassigned Expenses
(b) Administrative Services
(c) Fiscal Services
(d) General Services

Table 2 (cont.)

SERVICE: II - Sub-acute Hospitalization
RATES: B
DIRECT REVENUE ACCOUNTS:

3200 Skilled Nursing
3201 Rehabilitation
3202 Extended Care Facility
3280 Intermediate
3320 Residential
3181 Detoxification

DIRECT EXPENSE ACCOUNTS:

6200 Skilled Nursing
6201 Rehabilitation
6202 Extended Care Facility
6280 Intermediate
6320 Residential
6181 Detoxification

INDIRECT EXPENSE ACCOUNTS:

See Page 18

SERVICE: III - Acute Care : Obstetrics
RATES: C1 = Deliveries
C2 = Abortions - Outpatient
DIRECT REVENUE ACCOUNTS:

3160 Obstetrics
4010 Labor & Delivery
4040 Allocated Anesthesiology

DIRECT EXPENSE ACCOUNTS:

6160 Obstetrics
7010 Labor & Delivery
7040 Allocated Anesthesiology

INDIRECT EXPENSE ACCOUNTS:

See Page 18

Table 2 (cont.)

SERVICE: IV - Acute Care: Psychiatric
RATES: D1, D2 (Sliding Rate)
DIRECT REVENUE ACCOUNTS:

3140 Psychiatric Acute
3123 Ped. Psychiatric
3240 Psychiatric Long-Term
4222 Recreational

DIRECT EXPENSE ACCOUNTS:

6140 Psychiatric Acute
6123 Ped. Psychiatric
6240 Psychiatric Long-Term
7222 Recreational

INDIRECT EXPENSE:

See Page 18

SERVICE: V - Acute Care: Pediatric
RATES: F1 = Medical
F2 = Surgical
DIRECT REVENUE ACCOUNTS:

3121 Medical/Surgical
3124 Isolation
3125 Rehabilitation
3126 Other (Specify)

DIRECT EXPENSE ACCOUNTS:

6121 Medical/Surgical
6124 Isolation
6125 Rehabilitation
6126 Other (Specify)

INDIRECT EXPENSE ACCOUNTS:

See Page 18

Table 2 (cont.)

SERVICE: VI - Acute Care: Medical
RATES: G
DIRECT REVENUE ACCOUNTS:

3081 Medical, Acute

DIRECT EXPENSE ACCOUNTS:

6081 Medical, Acute

INDIRECT EXPENSE ACCOUNTS:

See Page 18

SERVICE: VII - Acute Care: Surgical
RATES: H
Special Surgeries: H1, H2, etc.
DIRECT REVENUE ACCOUNTS:

3082 Surgical Acute
4020 Surgery And Recovery

4021 Surgery - General (Major)
4022 Surgery - Organ Transplant
4023 Surgery - Open Heart
4024 Surgery - Neurosurgery
4025 Surgery - Orthopedic
4026 Surgery - Minor
4027 Recovery Room
4040 Allocated Anesthesiology

DIRECT EXPENSE ACCOUNTS:

6082 Surgery Acute
7020 Surgery and Recovery

7021 Surgery - General (Major)
7022 Surgery - Organ Transplant
7023 Surgery - Open Heart
7024 Surgery - Neurosurgery
7025 Surgery - Orthopedic
7026 Surgery - Minor
7027 Recovery Room
7040 Allocated Anesthesiology

INDIRECT EXPENSE ACCOUNTS:

See Page 18

Table 2 (cont.)

SERVICE: VIII - Acute Care: Nursery
RATE: I
DIRECT REVENUE ACCOUNTS:

3170 Nursery Acute

3171 Premature
3172 Newborn
3173 Other Nursery Units
3122 Neonatal Care

DIRECT EXPENSE ACCOUNTS:

6170 Nursery Acute

6171 Premature
6172 Newborn
6173 Other Nursery Units
6132 Neonatal

INDIRECT EXPENSE ACCOUNTS:

See Page 18

Table 2 (cont.)

SERVICE: IX - Special, High Technology, High Cost Equipment
RATES: J
J1 = Hyperbaric Chamber
J2 = Brain Scanner
J3 = Dialysis (Out-Patient)
DIRECT REVENUE ACCOUNTS:

4190 Dialysis

DIRECT EXPENSE ACCOUNTS:

7190 Dialysis

INDIRECT EXPENSE ACCOUNTS:

See Page 18

SERVICE: X - Clinic: Psychiatric
RATE: K
DIRECT REVENUE ACCOUNTS:

DIRECT EXPENSE ACCOUNTS:

INDIRECT EXPENSE ACCOUNTS:

See Page 18

SERVICE: XI - Clinic: Dental
RATE: L
DIRECT REVENUE ACCOUNTS:

DIRECT EXPENSE ACCOUNTS:

INDIRECT EXPENSE ACCOUNTS:

See Page 18

Table 2 (cont.)

SERVICE: XII - Clinic: Other
RATE: M
DIRECT REVENUE ACCOUNTS:

4261 Clinics

4261 Admitting
4262 Diabetics
4263 ENT
4264 Eye
4265 Obstetrics/Gynecology
4266 Orthopedic
4267 Pediatrics
4268 Surgery
4269 Cardiology
4271 Physical Medicine
4272 Urology

DIRECT EXPENSE ACCOUNTS:

7261 Clinics

7261 Admitting
7262 Diabetics
7263 ENT
7264 Eye
7265 Obstetrics/Gynecology
7266 Orthopedic
7267 Pediatrics
7268 Surgery
7269 Cardiology
7271 Physical Medicine
7272 Urology

INDIRECT EXPENSE ACCOUNTS:

See Page 18

SERVICE: XIII - Surgical Day Care
RATES: N
DIRECT REVENUE ACCOUNTS:

4030 Surgical Day Care

DIRECT EXPENSE ACCOUNTS:

7030 Surgical Day Care

INDIRECT EXPENSE ACCOUNTS:

See Page 18

Table 2 (cont.)

SERVICE: XIV - Radiation Therapy
RATE: 0
DIRECT REVENUE ACCOUNTS:

4150 Radiology - Therapeutic

4151 Chemotherapy
4152 Radiation Therapy
4153 Other
4162 Nuclear - Therapeutic

DIRECT EXPENSE ACCOUNTS:

7150 Radiology - Therapeutic

7151 Chemotherapy
7152 Radiation Therapy
7153 Other
7162 Nuclear - Therapeutic

INDIRECT EXPENSE ACCOUNTS:

See Page 18

SERVICE: XV - Emergency Room
RATE: P1 = Level I
P2 = Level II
DIRECT REVENUE ACCOUNTS:

4230 Emergency Room
4250 Psychiatric E.R.

DIRECT EXPENSE ACCOUNTS:

7230 Emergency Room
7250 Psychiatric E.R.

INDIRECT EXPENSE ACCOUNTS:

See Page 18

Table 2 (cont.)

SERVICE: XVI - Education
RATE: E
DIRECT REVENUE ACCOUNTS:

5260 Student Housing
5230 LVN Program
5220 School of Nursing
5250 Paramedical Education
5270 Other Education Activities
5240 Medical Post Graduate Education

DIRECT EXPENSE ACCOUNTS:

8260 Student Housing
8230 LVN Program
8220 School of Nursing
8250 Paramedical Education
8270 Other Education Activities
8240 Medical Post Graduate Education

INDIRECT EXPENSE ACCOUNTS:

See Page 18

Table 3

	SYSTEM OF ACCOUNTS		Rate	Method of	
	Revenue (1)	Expense (2)	Code (3)	Allocation (4)	Statistic (5)
DAILY HOSPITAL SERVICES					
Medical/Surgical Intensive Care	3010	6010	A		
Coronary Intensive Care	3020	6020	A		
Definitive Observation	3030	6030			
Pediatric Intensive Care	3040	6040	A		
Psychiatric Isolation	3050	6050	A		
Other Intensive Care Units	3060	6060	A		
Medical/Surgical Acute	3080	6080	G & H		
Pediatric Acute	3120	6120	F		
Psychiatric Acute	3140	6140	D		
Obstetrics Acute	3160	6160	C1, C2		
Nursery Acute	3170	6170	I		
Other Acute Care Units	3180	6180			
Skilled Nursing	3200	6200	B		
Psychiatric Long-Term	3240	6240	B		
Intermediate Care	3280	6280	B		
Residential	3320	6320	B		
Other Long-Term	--				
Other Daily Services (Specify)	3360	6360			
ANCILLARY SERVICES					
Labor and Delivery	4010	7010	C1		
Surgery and Recovery	4020	7020	H		
Surgical Day Care	4030	7030	N		
Anesthesiology	4040	7040	C & H		
Central Services and Supply	4050	7050	a		
Laboratories - Clinical	4060	7060	a		
Laboratories - Pathological	4070	7070	a		
Laboratories - Pulmonary Function	4080	7080	a		
Laboratories - Other	4090	7090	a		
Blood Bank	4100	7100	a		
Electrocardiology	4110	7110	J		
Electromyography	4120	7120	J		
Electroencephalography	4130	7130	J		
Radiology - Diagnostic	4140	7140	a		
Radiology - Therapeutic	4150	7150	P or J		
Nuclear Medicine	4160	7160	P or J		

a = allocate b = rate, not allocated

Table 3
SYSTEM OF ACCOUNTS (cont.)

	Revenue (1)	Expense (2)	Rate Code (3)	Method of Allocation (4)	Statistic (5)
ANCILLARY SERVICES (cont.)					
Pharmacy	4170	7170	a		
Inhalation Therapy	4180	7180	a		
Dialysis	4190	7190	J3		
Physical Therapy	4200	7200	a		
Occupation Therapy	4210	7210	a		
Other Physical Medicine	4220	7220	a		
Emergency	4230	7230	P1 or P2		
Ambulance	4240	7240	P1 or P2		
Psychiatric ER's	4250	7250	P		
Clinics	4260	7260	K, L, M		
Home Health Services	4400	7400			
Other Ancillary Services (Specify)	4410	7410			

a = allocate b = rate, not allocated

Table 3 (cont.)
SYSTEM OF ACCOUNTS
INDIRECT EXPENSE

	Revenue (1)	Expense (2)	Expense[1] Group (3)	Allocation Method (4)	Statistic (5)
*Interest - Other No NCE for Interest		8870	2		
Insurance - Other		8840	1		
Licenses & Taxes (Other Than Income)		8850	1		
Depreciation & Amortization		8810	1	AS IN MANUAL	
*Leases & Rentals		8820	2		
*Interest - Working Capital		8860	2		
Hospital Administration		8610	1		
Governing Board Expense		8620	1		
Public Relations		8630	1		
Management Engineering		8640	1		
Other Administrative Services		8750	1		
Management Services	5740		1		
General Accounting		8510	1		
Communications		8520	1		
Other Fiscal Services (Specify)		8570	1		
Printing & Duplicating		8310	1		
Personnel		8650	1		
Employee Medical Services Adm.		8660	1		
Employee Benefits (Non-Payroll)		8880	1		
Cafeteria	5330	8330	2		
Purchasing & Stores	5420	8420	1		
Housekeeping		8460	1		
Grounds		8430	1		
Security		8440	1		
Parking	5450	8450	1		
Plant Operations	5460	8470	1		
Plant Maintenance		8480	1		
Other General Services		8490	1		
Employee Housing	5380	8380	2		
Physician's Offices & Other Rentals	5390	8390	2		
Dietary		8340	1		
Laundry & Linen	5350	8350	1		
Patient Accounting		8530	1		
Data Processing	5540	8540	1		
Credit & Collection		8550	1		
Auxiliary Groups		8670	1		

[1]See Page 2, Recognized Expense Codes
*Included in Capital Costs.

Table 3
SYSTEM OF ACCOUNTS
INDIRECT EXPENSE (cont.)

	Revenue (1)	Expense (2)	Expense[1] Group (3)	Allocation Method (4)	Statistics (5)
Chaplaincy Services		8680	1		
Medical Library		8690	1		
Medical Records	5700	8700	1		
Medical Staff		8710	1		
Social Services		8360	1	AS IN MANUAL	
Insurance - Prof. Liability		8830	1		
Admitting		8560	1		
Other (Specify)		8890	1		
Other Retail Operations	5400	8400	2		
Nursing Administration		8720	1		
Inservice Education - Nursing		8740	1		
Central Service (w/o Cost of Sales)			1		
Pharmacy (w/o Cost of Sales)			1		
Research Adm. Office		8010	2		
Research Projects		8020	2		
Other Research (Specify)			2		
Education Adm. Office[2]		8210	E	b	
Student Housing	5260	8260	E	b	
LVN Program	5230	8230	E	b	
School of Nursing	5220	8220	E	b	
Paramedical Education	5250	8250	E	b	
Other Education Activities	5270	8270	E	b	
Medical Post Graduate Educ.	5240	8240	E	b	
Research/Educ/Rev. & Transf.					
COST RECOVERIES					
Cafeteria Sales					
Janitorial & Maintenance Services					
Parking Revenue					
Employee Housing					
Physicians' Offices & Other Rentals					
Data Processing Services					
Management Services					
Purchasing/Stores Services					
Medical Records/Abstract					
Laundry & Linen Services					
Trans. for Operations (Non-Rev Cntrs)					
Other Cost Recoveries (Specify)					

[1]See Page 2, Recognized Expense Codes b = Rate, Not Allocated
[2]Rate Code Group "E" For All Education Expenses #8210-8270

RATE FORMULATION
SUMMARY SHEET

PIPE FORM A

Table 4.1

	CODE	LEVEL	APPROVED & LICENSED SERVICES/ RATES	1 FULL COST	2 UNITS OF SERVICE 1974	3 COST UNIT 1974	4 FACTOR FOR INFLATION	5 ADJUSTMENTS	6 PROJECTED VOLUME 1	7 FIXED EXP. UNIT 1975	8 VAR. EXP. UNIT 1975	9 ROI UNIT 1975	10 RATE UNIT 1975
						1 ÷ 2=3							
1	A	1	Intensive Care										
2	A	2	ICU										
3	B		Sub-acute Hospital										
4	C	1	Obstetries (Deliveries)										
5	C	2	OB (Abortions - Outpat)										
6	D	1	Psychiatric										
7	F	1	Pediatric (Med)										
8	F	2	Pediatric (Surg)										
9	G	1	Medical										
10	H	1	Surgical (Minor)										
11	H	2	Surgical (Major)										
12	I		Nursery										
13	J	1	High Technology										
14	J	3	Dialysis (Outpatient)										
15	K		Psychiatric Clinic										
16	L		Dental Clinic										
17	M		Other - Clinic										
18	N		Surgical Day Care										
19	O		Radiation Therapy										
20	P	1	Emergency Room										
21	P	2	Emergency Room										
22													
23	E		Education Premium										

[1]Outline of Projection Method Must Be Included

EXPLANATIONS TO PIPE FORM A

Column 1

Full Cost: Total of direct and indirect recognized and reasonable expenses including allocation of unassigned expenses.

Column 2

Units of Service: either patient day, a relative value unit, or visit depending on service.

NOTE: Relative value unit or relative expense unit will allow for sliding scale for per day expense. However, regardless of the unit used, further cost behavior research is necessary.

Column 3

Cost per unit: Column 1 divided by Column 2.

Column 4

Factor for Inflation: adjustment for inflation using hospital inflation index (see Section B.3 in text).

Column 5

Adjustments: licensed and approved facilities that will come on-line in budget year should be timed into the budget. Other revenue and expense adjustments should also be made here. Number taken from Column 3, Row 12, Rate Formulation PIPE Form E.

Column 6

Projected Volume: anticipated and expected volume of service expressed in the appropriate units of service. Common forecasting methods, linear regression, curvi-linear regression, trend line and other can be used provided sufficient historical data exist. In addition, "community needs" can be more easily forecasted than demand facing the individual hospital. Cooperation in a service area could prove very valuable in year-to-year volume forecasts by determining total market projections.

Column 7 and 8

Fixed and variable expense taken from rate formulation, PIPE Form E, Column 4.

Column 9

SM/Unit: Standard Margin per unit as defined in text. Standard Margin allocated according to depreciation-allocation-statistic.

Column 10

Rate/Unit: Total financial requirements including a return on assets for budget year per unit of service. By definition, total

STATISTICAL BREAKDOWN

Table 4.2

PIPE FORM 3

YEAR_____

ACTUAL ☐

PROJECTION ☐

LEVEL	SERVICE/RATE	LABOR AND DELIVERY	SURGERY AND RECOVERY	ANESTHESIOLOGY	CENTRAL SERV. AND SUPPLY	LABORATORIES CLINICAL	LABORATORIES PATHOLOGICAL	LABORATORIES PULMONARY FUNCTION	LABORATORIES OTHER	BLOOD BANK	ELECTRO-CARDIOLOGY	ELECTRO-MYOGRAPHY	ELECTROEN-CEPHALOGRAPHY	RADIOLOGY DIAGNOSTIC	NUCLEAR MEDICINE
1	ICU														
2	ICU														
3	ICU														
	Sub-acute Hosp														
1	Obstetrics														
2	Obstetrics														
1	Psychiatric														
1	Pediatric														
2	Pediatric														
	Medical														
1	Surgical														
2	Surgical														
3	Surgical														
	Nursery														
1	High Technlgy														
2	High Technlgy														
3	High Technlgy														
	Psych./Clinic														
	Dental/Clinic														
	Other/Clinic														
	Surg. Day Care														
	Rad. Therapy														
1	Emergency Rm														
2	Emergency Rm														
	Education														
	Premium														

STATISTICAL BREAKDOWN
Table 4.2 (cont.)

YEAR_____

ACTUAL ☐

PROJECTION ☐

CODE	LEVEL	SERVICE/RATE	PHARMACY	INHALATION THERAPY	DIALYSIS	PHYSICAL THERAPY	OCCUPATIONAL THERAPY	OTHER PHYSICAL MEDICINE	HOME HEALTH SERVICES	OTHER ANCILLARY					
A	1	ICU													
A	2	ICU													
A	3	ICU													
B		Sub-acute Hosp													
C	1	Obstetrics													
C	2	Obstetrics													
D	1	Psychiatric													
F	1	Pediatric													
F	2	Pediatric													
G		Medical													
H	1	Surgical													
H	2	Surgical													
H	3	Surgical													
I		Nursery													
J	1	High Technlgy													
J	2	High Technlgy													
J	3	High Technlgy													
K		Psych./Clinic													
L		Dental/Clinic													
M		Other/Clinic													
N		Surg Day Care													
O		Rad. Therapy													
P	1	Emergency Rm													
P	2	Emergency Rm													
E		Education Premium													

FPC FORM C

COMPUTATION OF AVERAGE EQUITY CAPITAL

Table 4.3

YEAR_____

ACTUAL ☐

PROJECTION ☐

	MONTH	EQUITY CAPITAL BEGINNING OF PERIOD	CAPITAL INVESTMENTS DURING PERIOD	GAIN (OR LOSS) SALE OF ASSETS	WITHDRAWALS OR DIVIDEND	OTHER INCREASES OR DECREASES	INCREASES OR DECREASES DUE TO OPERATIONS	EQUITY CAPITAL END OF MONTH NET TOTAL OF 1 - 6
		1	2	3	4	5	6	7
1	JANUARY							
2	FEBRUARY							
3	MARCH							
4	APRIL							
5	MAY							
6	JUNE							
7	JULY							
8	AUGUST							
9	SEPTEMBER							
10	OCTOBER							
11	NOVEMBER							
12	DECEMBER							
13								
14	TOTAL							

Line 14, Column 7 divided by 12 = Average Equity Capital.

EXPENSE DATA BY RATE CENTER

Table 4.4

	1974				1974						1975			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	BUDGET		COST UNIT	% OF TOTAL	ACTUAL		COST UNIT	% OF TOTAL	VARIANCE TOTAL	VARIANCE SPENDING		BUDGET	COST UNIT	% OF TOTAL
VARIABLE EXPENSES														
Wages & Salaries														
Supplies														
Variable Admin.														
Physician & Student Comp.														
Adjustment														
Purchased Serv.														
Prof. Fees														
External														
Internal														
UNASSIGNED EXP.														
Vol. Related Exp.														
Dietary														
Gen. Pat. Serv.														
Purchasing & Stores														
Housekeeping														
Laundry & Linen														
Central Serv. & Supplies														
Pharmacy														
FIXED EXPENSES														
General Admin.														
Nursing Admin.														
Plant Services														
Employee Serv.														
Interest-Other														
Interest- Working Capital														
Depreciation & Amort.														
Other														
TOTAL EXPENSE									VOLUME VARIANCE					
UNITS OF SERVICE														

RATE FORMULATION BY RATE CENTER

PIPE FORM E

YEAR _____

Table 4.5

	1	2	3	4	5	6
	BUDGET 1975	FACTOR FOR INFLATION	ADJUSTMENTS	1975 COST UNIT	ROI	TOTAL FINANCIAL REQUIREMENTS
VARIABLE EXPENSES						
PURCHASED SERVICES						
UNASSIGNED EXPENSES						
Volume Related						
Fixed Expenses						
TOTAL						
Units of Service					1	1

[1]PER UNIT

EXPLANATIONS TO PIPE FORM E

Column 3

Adjustments

Adjustments to expenses specifically for licensed and approved expansion coming on-line, significant economic factors, positive or negative variances from previous years as detailed in Section C in text.

APPENDIX G

ACCOUNTING FOR COSTS

A. Summary

B. Introduction

   1. Recognized Expenses

   2. Cost Allocation

   3. Product Costing

   4. Summary

C. Determining Costs Within the Current System

D. Classification of Fixed and Variable Expenses

ACCOUNTING FOR COSTS

A. Summary

The objective of this task is to design an accounting procedure that accurately accumulates costs by functional output categories and provides the costing foundation for the Multiple Rate System (MRS) and for budget and rate review.

Disclosure forms of the California Health Facilities Commission provide uniform departmental cost data. This section provides a process for transforming the departmental cost data into functional area cost data. Working from the departmental data and the MRS statistical base (see Appendix F), five steps are needed to step-down the cost data into the required format:

(1) The functional areas must be defined. The Multiple Rate System provides functional areas related to patient services.

(2) The statistical basis for the allocation of ancillary service costs to the MRS functional areas must be developed.

(3) All recognized expenses must be categorized as either fixed or variable.

(4) Costs per unit statistics according to fixed and variable components must be developed.

(5) Historical cost information to support a flexible budgeting program must be accumulated and presented.

Implementation of the process should result in a cost accounting system that accumulates costs by functional areas.

B. Introduction

The foundation of an equitable budget review program or management information system is an accurate and uniform cost accounting system. The California Hospital Accounting Manual (CHAM)[1] attempts to provide such a uniform system. This section will use CHAM to the extent possible. However, since CHAM was designed for retrospective analysis, it is not completely compatible with the prospective nature of the Prospective Incentive Payment Experiment (PIPE). While much of the data for prospective and retrospective analyses are similar, reporting and output formats can be very different.

Cost accounting generally attempts to match expenses related to specific inputs to specific outputs or products. Many types of cost accounting systems that serve specific industry needs have been developed. The health industry, however, has not yet developed a uniform cost accounting system. The California Hospital Accounting Manual should not be confused with a managerial cost accounting system. The California Hospital Accounting Manual is strictly a means of obtaining uniform Disclosure data from California hospitals. What is necessary for our purposes is a system whereby costs of inputs can be associated with outputs.

One of the most important components of a cost accounting system is that it have stated objectives. The objectives must follow from the nature of the business. The objective of the

---

[1]California Health Facilities Commission, California Hospital Accounting Manual, Sacramento: The Commission, 1974.

hospital cost accounting system should be to capture and record the expenses involved in providing patient care. Some expenses can be directly costed to the patient care unit, as with an atomic pacemaker; directly allocated, as with nursing care; or indirectly allocated, as with depreciation. The problem most often confronted is that hospitals are in more businesses than patient care. A working list could include five separate operating activities with distinctly different outputs and, consequently, different objectives. They are:

(1) Daily Hospital Services;

(2) Ancillary Health Services;

(3) Noninservice Educational Programs;

(4) Research Activities;

(5) Activities Not Directly Related to Patient Care.

Current accounting systems lump all of these operations and provide consolidated statements. The required expense and revenue detail and format could be totally different for Ancillary Health Services (2) and Noninservice Educational Programs (3). Each of these activities could very well require different cost accounting systems.

The cost accounting system should be designed as a managerial tool to provide internal operating information so that control over the production process can be maintained. Conventional financial accounting meets the requirements of external sources (e.g., Securities and Exchange Commission, Internal Revenue Service). Because the information is drawn from the same sources, cost accounting and financial accounting overlap, but they should

not be viewed as similar information sources because each is satisfying different objectives.

In theory, all that has to be done to achieve the objective is to record all the expenses associated with patient care. This simple theory, however, would require the complete overhaul of the hospital industry's cost accounting practices within California and still would not guarantee success. A compromise has to be developed to achieve the goal of determining the expense of providing patient care. The three procedures to accomplish this end are:

(1) a strict definition of which expenses will be recognized as necessary in the provision of hospital care;

(2) a method of allocating indirect expenses to the proper patient care cost center in an equitable manner; and

(3) a product costing function to determine cost per unit of service.

Cost accounting is the big picture that strives to align revenues, services and costs. The stream from the input of several resources to the eventual receipt of revenue is included in a comprehensive cost accounting system.

1. Recognized Expenses

Recognized expenses are those expenses that a hospital incurs in order to provide hospital-based services to the community. In establishing criteria for recognized expenses the overriding philosophy deals with the expenses associated with delivery of patient care. Several activities were listed above as the possible scope of hospital operations. Items (1) Daily Hospital Services, and (2) Ancillary Health Services, are the

patient-care-related operations of a hospital. Consequently, we are concerned with the expenses associated with these operating areas. As explained above, the cost accounting objectives for patient care could be different from those for Educational Programs. Each of these areas is of vital importance to society; yet because of different operating objectives, accounting for expenses as one unit distorts the meaning of the expenses.

Recognized Expenses (see Section D.1 in text) presents a detailed analysis of CHAM expense accounts. Working with the basic criteria of expenses required in the delivery of patient care, Recognized Expenses presents a list of expenses reflective of the current realities of hospital management.

2. Cost Allocation

Costs are allocated ultimately for the purpose of decision making within the hospital and/or by a regulatory agency. There are three aspects to the cost allocation problem:

(1) choice of a cost objective (some action or activity);

(2) the pooling of costs;

(3) the choice of the allocation base.

These must be considered simultaneously because they are interdependent.

Expense allocation is an attempt to bridge a gap in the direct costing system. To a large degree the gap is not a failure of the system but a consequence of direct costing in a complex organization. The method and statistics used in expense allocation will be significant in recording the true cost of patient care.

The allocation of an unassigned (not direct costed) expense should accurately reflect the consumption pattern of that expense.

For example, depreciation on a building should be allocated according to square feet occupied as a percentage of usable square feet. Selecting the statistical basis for cost allocation is a difficult task; any basis selected would be open to question. The California Hospital Accounting Manual (Section 5020) lists the statistical bases for cost allocation. Because of its uniform application, the California Hospital Accounting Manual allocation method is the most practical at this time for use in the Prospective Incentive Payment Experiment (PIPE) methodology.

To translate CHAM departmental cost data into functional output data will require an allocation of ancillary service costs to Multiple Rate System categories. This allocation procedure is based on the utilization of units of service in the different MRS categories (see Section L in the text, and Appendix F).

3. Product Costing

Following the allocation of costs, the problem of product costing presents itself. In rare circumstances cost allocation and product costing are the same step. However, where heterogeneity in products exists or many units of the product are produced, product costing becomes necessary. The accounting profession has created a spectrum of product-costing procedures to fulfill different requirements. At one pole is job-order costing that accumulates all costs for a recognizable and independent product. Process costing represents the other pole and includes products where there is continuous, mass production of like units.

Obviously, neither of these extremes replicates the situation in the hospital industry. Aspects of each costing procedure are embodied in the hospital structure. The key point is that product costing is an averaging process. The unit cost used in establishing charges or determining rates is the result of taking some accumulated (or projected) cost and dividing it by some measure of production or output. The basic distinction between job-order costing and process costing is the breadth of the denominator; in job-order costing it is small, but in process costing it is large.

Selection of the denominator to be used in budget and rate review is required. Service heterogeneity complicates the hospital costing task. The variety of services (medical procedures) commands varying attention, effort, different supplies usage and utilization of specialized resources. When costs are accumulated along functional output categories the denominator can be expressed in terms of the unit attached to the MRS output categories. For inpatient services this translates into a day of care in a specific service. In this way, costs are accumulated according to MRS category and costed (by fixed and variable costs) by dividing costs by the MRS denominator.

4. Summary

Cost accounting is the attempt to accumulate hospital expenses in a uniform fashion. The most important product of an accurate accounting system for PIPE is an understanding of cost behavior patterns. This approach goes a step further toward developing the capability of budgeting expenses and

volume. Cost accounting provides the historical cost/volume relationships for flexible budgeting.[2] This procedure seeks to accumulate hospital financial requirements by Multiple Rate System output units in order to prepare flexible budgets based on cost/volume relationships.

One crucial assumption made in this cost accounting adaptation is that the necessary accuracy and detail is captured at the hospital level. The California Health Facilities Commission (CHFC) forms and the California Hospital Accounting Manual were designed with disclosure of data as their objective. Our objective is quite different as the preceding pages indicated. However, it is essential that to the extent possible, the available data should be used. Cost accounting is a management tool designed to measure achievement toward objectives. It is not the responsibility of this project to define hospital operating objectives. As such, the modifications and additions

---

[2]A flexible budget is a budget that may be tailored to any level of activity, so that the evaluation of efficiency (the relationship of inputs to outputs) is not contaminated by comparing a budget for one level of activity with results for another level of activity. Although they are most often associated with the control of overhead, flexible budgets may also include direct materials and direct labor. Flexible budgets are based on careful studies of cost behavior patterns, therefore, they may be fitted to a particular volume, before or after the fact.

Flexible budgets tell how much cost should be incurred for any level of output, which is usually expressed in product units of standard direct-labor hours. Because it is not affected by variation in workload, the standard direct-labor hours allowed is a better yardstick than actual direct-labor hours for measuring volume or activity. The difference between standard and actual direct-labor hours becomes most pronounced with cyclical or low frequency (but intensive demand) services (e.g., Emergency Room services). Similarly, standards for other resource consumption would be superior to constantly measuring actuals.

suggested should provide the needed expense data without intruding on hospital management autonomy.

By accumulating cost data by MRS clusters, costs will be linked to patient days. The accounting structure will be along functional input/output lines rather than conventional departmental lines. The contribution income statements along with Disclosure data should provide a means for the hospital to determine the cost behavior for specific health services. This cost accounting approach also provides the necessary link to get from the Multiple Rate System to the Budgeting procedure discussed in Appendix H.

C. Determining Costs Within The Current System

To accumulate costs into the functional categories of the Multiple Rate System an additional step-down procedure has been added to the California Hospital Accounting Manual step-down (Page 20, CHAM Disclosure forms). After all unassigned costs have been stepped down to the revenue-producing centers, most ancillary service costs would be allocated to the MRS categories. The basis of allocation for this step-down would be units of service consumed by a specific MRS cluster of a specific ancillary service (see Section L in the text).

The California Hospital Accounting Manual provides for departmental cost breakdowns. The Multiple Rate System categories provide for functional cost breakdowns according to patient service. The Prospective Incentive Payment Experiment (PIPE) Form B, Statistical Breakdown (Table 1 on Pages 10 - 11 below),

STATISTICAL BREAKDOWN

PIPE FORM B

YEAR_____

Table 1

ACTUAL ☐

PROJECTION ☐

	CODE	LEVEL	SERVICE/RATE	LABOR AND DELIVERY	SURGERY AND RECOVERY	ANESTHESIOLOGY	CENTRAL SERV. AND SUPPLY	LABORATORIES CLINICAL	LABORATORIES PATHOLOGICAL	LABORATORIES PULMONARY FUNCTION	LABORATORIES OTHER	BLOOD BANK	ELECTRO-CARDIOLOGY	ELECTRO-MYOGRAPHY	ELECTROEN-CEPHALOGRAPHY	RADIOLOGY DIAGNOSTIC	NUCLEAR MEDICINE
1	A	1	ICU														
2	A	2	ICU														
3	A	3	ICU														
4	B		Sub-acute Hosp														
5	C	1	Obstetrics														
6	C	2	Obstetrics														
7	D	1	Psychiatric														
8	F	1	Pediatric														
9	F	2	Pediatric														
10	G		Medical														
11	H	1	Surgical														
12	H	2	Surgical														
13	H	3	Surgical														
14	I		Nursery														
15	J	1	High Technlgy														
16	J	2	High Technlgy														
17	J	3	High Technlgy														
18	K		Psych./Clinic														
19	L		Dental/Clinic														
20	M		Other/Clinic														
21	N		Surg. Day Care														
22	O		Rad. Therapy														
23	P	1	Emergency Rm														
24	P	2	Emergency Rm														
25																	
26	E		Education Premium														

PIPE FORM B

STATISTICAL BREAKDOWN
Table 1

YEAR_____

ACTUAL ☐

PROJECTION ☐

CODE	LEVEL	SERVICE/RATE	PHARMACY	INHALATION THERAPY	DIALYSIS	PHYSICAL THERAPY	OCCUPATIONAL THERAPY	OTHER PHYSICAL MEDICINE	HOME HEALTH SERVICES	OTHER ANCILLARY					
A	1	ICU													
A	2	ICU													
A	3	ICU													
B		Sub-acute Hosp													
C	1	Obstetrics													
C	2	Obstetrics													
D	1	Psychiatric													
F	1	Pediatric													
F	2	Pediatric													
G		Medical													
H	1	Surgical													
H	2	Surgical													
H	3	Surgical													
I		Nursery													
J	1	High Technlgy													
J	2	High Technlgy													
J	3	High Technlgy													
K		Psych./Clinic													
L		Dental/Clinic													
M		Other/Clinic													
N		Surg Day Care													
O		Rad. Therapy													
P	1	Emergency Rm													
P	2	Emergency Rm													
E		Education Premium													

would be required in order to develop the basis of allocation of ancillary service costs. If costs are accumulated by MRS categories, then cost comparisons and groupings between hospitals can be along functional lines rather than along aggregated or departmental lines.

The basis for equitable comparison between hospital functional areas would be the Income/Expense Statement and per unit costs for specific MRS categories. However, to obtain the needed detail and cost apportionment to understand cost behavior, the traditional Profit/Loss Statement should be modified.

The California Health Facilities Commission (CHFC) Income Statement (Table 2, Page 13 below) was designed for retrospective review of total operations. The objective appears to be a matching of Total Operating Revenue to Total Operating Expense. Line 24, "Net from Operations," emphasizes this objective. The remaining entries, Lines 25-29, go from "Net Operating Income" to "Net Income" for the entire hospital. The obvious shortcoming is that "Gross Operating Expenses" do not provide sufficient detail to perform product or rate costing. The form lends itself to analysis of broad hospital expenditure and revenue categories rather than the costing function.

The modified Income/Expense Statement used here (see Page 16 below) collects cost information by the relationship of the specific cost to volume fluctuations. Variable Operating Costs are separated from Fixed Operating Costs. Within Variable Operating Costs, Salaries and Wages, Supplies, and Purchased Services are collected separately. Fixed costs are divided into Depreciation, and Interest for Working Capital and General Debt. These

Table 2

CALIFORNIA HEALTH FACILITIES COMMISSION

INCOME STATEMENT

1	OPERATING REVENUE	
2	Daily Hospital Services	
3	Ancillary Services	
4	In-Patient	
5	Out-Patient	
6	GROSS REVENUE	XXXX
7	DEDUCTIONS FROM REVENUE	
8	Charity	(XXX)
9	Gifts, Indigent Care	(XXX)
10	Bad Debts	(XXX)
11	Contractual Allowances	(XXX)
12	NET PATIENT REVENUE	XXX
13	OTHER OPERATING REVENUE	
14	TOTAL OPERATING REVENUE	XXXX
15	OPERATING EXPENSES	
16	Daily Hospital Service	
17	Ancillary Services	
18	Research	
19	Education	
20	General Services	
21	Fiscal Services	
22	Administrative Services	
23	TOTAL OPERATING EXPENSE	(XXXX)
24	NET FROM OPERATIONS (15-26)	XXXX
25	NONOPERATING REVENUE AND EXPENSE	(XXXX)
26	NET INCOME BEFORE TAXES	XXXX
27	PROVISION FOR INCOME TAXES	(XXXX)
28	NET INCOME BEFORE EXTRAORDINARY ITEMS	
29	NET INCOME	XXXX

accounts are further divided between Revenue/Cost (R/C) Center Specific Assets and General Overhead Assets. General Administrative Expenses exclusive of Overhead Asset allocation is a separately distinguished account. So structured, the Income Statement will provide information relevant to Variable, Semi-Variable and Fixed Costs; initial statistics to determine break-even, productivity and interhospital comparisons; and financial ratios of the individual cost areas to total costs. The first step is to categorize the expenses within the R/C Centers.

Within the R/C Center the Natural Classification of Expenses should be segmented into Fixed, Variable and Semi-Variable costs. Although these terms are widely used, to avoid confusion the following definitions are intended:[3]

(1) Fixed Costs

Those costs which do not vary with respect to levels of activity over a specific time period and volume range. As volume increases, cost per unit decreases.

(2) Semi-Variable Costs

Costs that exhibit a combination of Fixed and Variable behavior in per unit cost; specifically, decreasing cost per unit over a specific range of volume. Increasing output beyond this range requires additional resources. Semi-Variable costs are not specifically related to volume of service as much as to availability and potential capacity for service. Resources that must be added in discreet quantities

---

[3]Charles T. Horngren. Cost Accounting: A Management Emphasis, Englewood Cliffs, N.J.: Prentice-Hall, 1972.

(for example, X-Ray machines) exhibit this quasi-step cost function behavior.

(3) Variable Costs

Total costs vary with volume yet maintain a relatively constant per unit cost.

The contribution approach Income Statement on the following page (Table 3) departs from the traditional in its division of expenses between Fixed and Variable for a specific time and activity range for each rate. This type of statement is the key to flexible budgets and problems of product and service costing. As with the traditional method, Operating Expenses are matched to Operating Revenues. The Revenue portions of the statements are the same; expenses differ, although of necessity Net Income will be the same for both systems. Variable Expenses (A and C) are totaled as are Purchased Services (B) and Fixed Expenses (D and E). This type of expense breakdown permits interhospital comparison even if facility age and size are disproportionate. Similarly, approximate savings due to closing, consolidating or discontinuing part or all services can be determined from the statement.

More detailed information is provided in the Contribution Statement than the Traditional Income Statement. This detail can well be worth the effort if excess capacity exists and is to be eliminated. However, the objective of an accurate information system is to provide decision makers with information, not with predetermined conclusions or cookbook procedures for hospitals.

The next task in the cost accounting procedure is to define the Revenue/Cost Centers. Definition of these centers must

TABLE 3

CONTRIBUTION APPROACH

INCOME/EXPENSE STATEMENT

REVENUE STATEMENT		
OPERATING REVENUE		
Daily Hospital Services		XXXXX
Ancillary Services		
In-Patient		XXXX
Out-Patient		XXXX
GROSS REVENUE		XXXXX
DEDUCTIONS FROM REVENUE		
Charity	XXX	
Gifts	XXX	
Bad Debts	XXX	
Contractual Allowances	XXXX	(XXXXX)
NET PATIENT REVENUE		XXXXX
VARIABLE		
Wages & Salaries	XXXXX	
Supplies [1]	XXXXX	
Variable Admin.[2]	XXXXX	
Physican & Student Comp.	XXXXX	
Adjustment [3]	XXXXX	(XXXXX) (A)
PURCHASED SERVICES [4]		
Prof. Fees	XXXXX	
External	XXXXX	
In-House	XXXXX	(XXXXX) (B)
UNASSIGNED EXPENSES		
VOLUME-RELATED EXPENSES [5]		
Dietary	XXXXX	
General Patient Serv.	XXXXX	
Purchasing & Stores	XXXXX	
Housekeeping	XXXXX	
Laundry & Linen	XXXXX	
Central Serv. & Supplies	XXXXX	
Pharmacy	XXXXX	(XXXXX) (C)
CONTRIBUTION TO FIXED EXPENSES		XXXXX
FIXED EXPENSES [6]		
General Admin.	XXXXX	
Nursing Admin.	XXXXX	
Plant Services	XXXXX	
Employee Serv.	XXXXX	(XXXXX) (D)
Interest-Other	XXXXX	
Interest-Working Cap.	XXXXX	
Depreciation & Amort.	XXXXX	
Other [7]	XXXXX	(XXXXX) (E)
TOTAL EXPENSES		
EXTRAORDINARY ITEMS		XXXX
NET INCOME [8]		XXXXX

NOTES TO TABLE 3

[1]This Income Statement can be used for total hospital operations and individual programs. Supply costs that are included here are those that are directly consumed in the program center or allocated to the program that exhibit the variable and semi-variable per unit cost behavior discussed in the text.

[2]Variable administrative expenses are the administrative expenses unique to an R/CC. It is not central administration expense allocated to a particular R/CC. The account includes labor costs for supervisory personnel.

[3]The adjustment is needed when using data from CHFC forms and reflects the reclassification of certain expenses to other accounts.

[4]If a service is purchased externally on a fixed (lump sum contract) or variable fee-for-service, it should be included here beside the appropriate entry. Since there are multiple rates for different programs, purchases by one program of another's output will be included here at the established rate or average cost. The consolidated statement will net in-house purchases and transfers. The most common in-house purchased services would be ancillary services.

[5]Volume-related unassigned expenses are those expenses that are a function of the volume of services provided. However, since these expenses cannot be matched on a dollar-by-dollar system, they have been allocated according to patient volume statistics.

[6]Fixed Expenses: These expenses are fixed from an accounting definition using a time period of one year.

[7]Other contains fixed expenses not specifically listed and adjustments due to extraordinary economic events, inflation and prediction error.

[8]The Income Statement will be the basis for rate determination. Each Revenue/Cost center will have a rate determined for it and an income statement. Per unit income statements for each rate can be used to determine break-even levels of production and in developing pro forma flexible budgets.

A consolidated total hospital income statement will also be generated.

coordinate with the overall objectives of accounting for patient care costs and services (i.e., the appropriate output measure). The Multiple Rate System (MRS) categories (see Table 4 on Page 19) provide cost groupings or clusterings that are compatible both with licensing regulations[4] and the cost accounting goals. By collecting expenses and volume statistics by the MRS categories, hospital cost behavior can be related to patient mix and volume of services. While the initial implication is that MRS will provide the basic structure for payment, this is not necessary. The MRS clusters are reflective of patient services. They provide a sound basis of comparison across hospitals, and provide a mechanism for evaluating hospital performance through focusing on the "final product." The statistical base needed to support MRS is sophisticated but not more complicated than the present system. The inclusive aspects of MRS provide a foundation for projecting total service needs and expenses by an understanding of cost behavior.

One crucial assumption made in this cost accounting adaptation is that the necessary accuracy and detail is captured at the hospital level. The CHFC forms and the California Hospital Accounting Manual were designed with disclosure of data as their objective. Our objective is different; however, the realities demand that to the extent possible the available data should be used. It must also be remembered that cost accounting is a management tool designed to measure achievement toward objectives. This project does not define hospital operating objectives.

---

[4]Health and Safety Code, Chapter 2, Division 2, and California Administrative Code, Title 22, Division 5, Chapter 1.

Table 4

MULTIPLE RATE SYSTEM GROUPINGS

I.	Intensive Care
II.	Sub-acute Hospitalization
III.	Obstetrics
IV.	Acute Care: Psychiatric
V.	Acute Care: Pediatric
VI.	Acute Care: Medical
VII.	Acute Care: Surgical
VIII.	Acute Care: Nursery
IX.	Special High Technology, High Cost Equipment
X.	Clinic: Psychiatric
XI.	Clinic: Dental
XII.	Clinic: All Other
XIII.	Surgical Day Care
XIV.	Radiation Therapy
XV.	Emergency Room
XVI.	Educational Programs

By accumulating cost data by MRS clusters, costs will be linked to patient days. The accounting structure will be along functional input/output lines rather than conventional departmental lines. The contribution income statements along with Disclosure data should provide a means for the hospital to determine the cost behavior for specific services. The cost accounting approach also provides the necessary link to get from the Multiple Rate System to the Budgeting procedure discussed in Appendix H.

D. Classification of Fixed and Variable Expenses

Contribution Approach Income Statements and Flexible Budgeting require accounting that clearly distinguishes between fixed and variable expenses. Simplistic nonoperating definitions of fixed, variable and semi-variable expenses were presented on Pages 11 and 12. The discussion below attempts to translate the general framework into a workable structure that utilizes the cost data that are available from hospitals. California Health Facilities Commission reporting forms, Pages 17, 18, 20, 21a and 22a are the primary sources of the needed cost information.

To clarify the initial definitions, fixed costs are expenses that do not vary due to volume changes over a relevant range of activity in the time period of one year or less. Variable costs are volume-related expenses, and by default all nonfixed expenses.

The category of semi-variable will not be used.[5] Semi-variability is a difficult cost behavior to isolate in an operation and, over a small range of activity, may not even be detected. While variable costs are easier to isolate, the true cost behavior could be difficult to quantify. The relationship between costs and volume could be quadratic instead of a simple linear relationship. Until further work quantifies the underlying cost behavior for specific hospital products, the relationship between variable costs and volume will have to be assumed linear.

Table 5 (Pages 25-28 below) categorizes each of the Natural Classification of Expense categories as fixed or variable. The California Health Facilities Commission Disclosure data will not provide sufficient detail to have each of the accounts singled out and placed in the appropriate fixed or variable grouping; however, hospitals will be able to accumulate costs and to budget using a fixed or variable categorization. The following is an explanation of Table 5 categories.[6]

---

[5]In the analysis of hospital costs for budget and rate purposes, the concerns are with marginal changes in volume and inputs. For example, while cost behavior for nurse staffing over occupancy ranges from 0 to 100 percent exhibits a step-variable function, over a limited range of 60 to 100 percent the relationship could be simple variable for the entire hospital. Special units, like intensive care, exhibit this variable behavior over their entire operating ranges. For narrow operating ranges and short time periods, hospital costs can be divided into fixed and variable with little distortion of the true underlying cost behavior. Since most fluctuations in volume will be over a limited range of activity and since a one-year time period is being used, groupings need only be according to fixed and variable classifications.

[6]Unless otherwise indicated, page and column numbers refer to the CHFC forms (not appended).

(1) Pages 17 (Trial Balance Worksheet and Supplemental Expense Information--Revenue-Producing Centers) and 18 (Nonrevenue-Producing Centers) provide the basis for the fixed-variable cost breakdown. Column headings are the same for Pages 17 and 18, so the following explanation will refer only to columns. The fixed and variable costs identified here should be accumulated in the appropriate fixed and variable portions of the Contribution Income Statement to aid in the cost finding and budgeting functions. Account definitions and procedures are as outlined in the California Hospital Accounting Manual. No additional cost data will be required of the hospital.

(2) Columns 1 - 5, Salaries, Wages and Benefits

An instant problem develops here: some personnel costs are fixed and some are variable. Aggregated, this distinction is lost. Since labor costs are a large proportion of hospital costs, detail would be very important to projecting the cost impact of changes in a hospital's level of activity. Pages 21a and 22a provide the needed detail according to the Natural Classification of Expenses. The classifications in Table 5 for salary and wage categories can be used. Payroll benefits will be associated with the appropriate wage category.

(3) Column 6, Reclassified Physician and Student Compensation--Fixed

These expenses should be treated as fixed for the projected one-year period. The number of physicians and

students would be related to the projected volume of activity. For our purposes they are treated as fixed because adjustments within the one-year period could not be made. Physician and student compensation would most probably be a step-variable expense if the total range of activity from 0 to 100 percent occupancy were examined.

(4) Column 7, Professional Fees--Variable and Column 8, Purchased Services--Variable

These two groupings represent contracted services, most likely resulting from a formal contract related to volume of services. Although the expenses could be a "fixed" financial obligation, they would be correlated to projected volume for budget purposes.

(5) Column 12, Supplies--Variable

(6) Column 13, Other--Fixed

The "Other" column includes the cost center specific expenses of insurance, licenses and taxes (other than income), leases and rentals, depreciation, subscription fees, telephones, and so on, to the extent that they can be direct-costed to a cost center. Lines 60-68, Page 18 for account numbers 8810-8890 capture the basic unassigned expenses for the total hospital. These rows only have entries in Column 13 and subsequent totals.

The classification of costs into fixed or variable is not a simple task. Any proposal that attempts to classify all expenses as either fixed or variable will fall short. However, the budgeting function requires a sound understanding of cost behavior and at least working definitions. The underlying cost behavior

patterns could emerge as more accurate data become available. Until that time a workable categorization to support the budgeting function must be developed.

FIXED AND VARIABLE CLASSIFICATIONS
TO BE USED AS AN AID TO BUDGETING

Table 5

NATURAL CLASSIFICATION OF EXPENSE		
Salaries and Wages		
.00	MANAGEMENT AND SUPERVISION	Fixed
.01	TECHNICIAN AND SPECIALIST	Fixed ORR*
.02	REGISTERED NURSES	Variable
.03	LICENSED VOCATIONAL NURSES	Variable
.04	AIDES AND ORDERLIES	Variable
.05	CLERICAL AND OTHER ADMINISTRATIVE	Fixed
.06	ENVIRONMENTAL AND FOOD SERVICE	Variable
.07	PHYSICIANS	Fixed ORR
.08	NON-PHYSICIAN MEDICAL PRACTITIONERS	Fixed ORR
.09	OTHER SALARIES AND WAGES	Variable
Employee Benefits		
.10	FICA	Function of Payroll
.11	SUI AND FUI	Function of Payroll
.12	VACATION, HOLIDAY, AND SICK LEAVE	Function of Payroll
.13	GROUP HEALTH INSURANCE	Function of FTEs
.14	GROUP LIFE INSURANCE	Function of FTEs
.15	PENSION AND RETIREMENT	Function of Payroll
.16	WORKMEN'S COMPENSATION INSURANCE	Function of FTE
.17	OTHER (NON-PAYROLL RELATED)	Function of FTEs
Professional Fees		
.20	MEDICAL--PHYSICIANS	Variable
.21	MEDICAL--THERAPISTS AND OTHER	Variable

* ORR = Over Relevant Range

.22	CONSULTING AND MANAGEMENT FEES	Variable
.23	LEGAL	Fixed
.24	AUDIT	Fixed
.25	OTHER	Variable (must specify)
Supplies		
.31	PROSTHESIS	Variable
.32	SUTURES AND SURGICAL NEEDLES	Variable
.33	SURGICAL PACKS AND SHEETS	Variable
.34	SURGICAL SUPPLIES--GENERAL	Variable
.35	ANESTHETIC MATERIALS	Variable
.36	OXYGEN AND OTHER MEDICAL GASES	Variable
.37	IV SOLUTIONS	Variable
.38	PHARMACEUTICALS	Variable
.39	RADIOACTIVE MATERIALS	Variable
.40	RADIOLOGY FILMS	Variable
.41	OTHER MEDICAL CARE MATERIALS AND SUPPLIES	Variable
.42	FOOD--MEATS, FISH, AND POULTRY	Variable (Patient Care Component)
.43	FOOD--OTHER	Variable (Patient Care Component)
.44	LINEN AND BEDDING	Variable
.45	CLEANING SUPPLIES	Predominantly Variable
.46	OFFICE AND ADMINISTRATIVE SUPPLIES	Predominantly Fixed
.47	EMPLOYEE WEARING APPAREL	Variable

TABLE 5 (cont'd)

.48	INSTRUMENTS AND MINOR MEDICAL EQUIPMENT	Variable if expensed in one accounting period
.49	OTHER MINOR EQUIPMENT	Variable (same as above)
.50	OTHER NON-MEDICAL SUPPLIES	Variable (specify)
Purchased Services		
.61	MEDICAL	Variable depending on contract specifications detail.
.62	REPAIRS AND MAINTENANCE	As above
.63	MEDICAL SCHOOL CONTRACTS (ONLY IN EDUCATION COST CENTERS)	Fixed, (see above, treated separately)
.64	MANAGEMENT SERVICES	Fixed (see above)
.65	COLLECTION AGENCIES	Variable (see above)
.66	OTHER--PURCHASED SERVICES	Variable (see above)
Other Direct Expenses		
.71	DEPRECIATION AND AMORTIZATION--LAND IMPROVEMENTS	Fixed
.72	DEPRECIATION AND AMORTIZATION--BUILDINGS AND IMPROVEMENTS	Fixed
.73	DEPRECIATION AND AMORTIZATION--LEASEHOLD IMPROVEMENTS	Fixed
.74	DEPRECIATION AND AMORTIZATION--EQUIPMENT	Fixed
.75	RENTAL/LEASE COSTS--BUILDINGS	Fixed
.76	RENTAL/LEASE COSTS--EQUIPMENT	Fixed
.77	UTILITIES--ELECTRICITY	Predominantly Fixed ORR
.78	UTILTIES--GAS	Predominantly Fixed ORR
.79	UTILITIES--WATER	Predominantly Fixed ORR
.80	UTILITIES--OTHER	Predominantly Fixed ORR
.81	INSURANCE--PROFESSIONAL LIABILITY	Variable (Predictable)

Table 5 (cont.)

.82	INSURANCE--OTHER	Fixed (Predictable)
.83	LICENSES AND TAXES (OTHER THAN ON INCOME)	Fixed (Predictable)
.84	OTHER UNASSIGNED COSTS	Specify
.85	TELEPHONE/TELEGRAPH	Fixed
.86	DUES AND SUBSCRIPTIONS	Fixed
.87	OUTSIDE TRAINING SESSION	Fixed
.88	TRAVEL	Fixed
.89	OTHER EXPENSES	Specify

Transfers *

.91	TRANSFERS TO OTHER HOSPITAL DEPARTMENTS--LABOR	
.92	TRANSFERS TO OTHER HOSPITAL DEPARTMENTS--SUPPLIES AND OTHER EXPENSE	
.93	TRANSFERS FROM OTHER HOSPITAL DEPARTMENTS--LABOR	
.94	TRANSFERS FROM OTHER HOSPITAL DEPARTMENTS--SUPPLIES AND OTHER EXPENSE	

* Transfers cancel out in the Budgeting process for the whole hospital. They should be considered variable in other cases.

TABLE 5 (cont'd)

BUDGETING

A. Summary

B. Introduction

C. Components of a Budgeting Program

   1. Operating Budget

   2. Cash Budget

   3. Capital Budget

   4. Detailed Variance Analysis

D. Merging MRS with Budgeting and Cost Per Service Unit Analysis

   1. Overview

   2. Variance from Budget

   3. Procedure for Determining Budget Using MRS Accounting Base

   4. Data Requirements for Budget and Rate Review

E. Interim Budgeting Procedure

   1. Modifications to the Budgeting Method

   2. Data Requirements for Interim Budget and Rate Review

F. Capital Expenditures Budget

   1. Function of Capital Budget Review

   2. Types of Expenditures Detailed in Capital Budgets

   3. Screening Procedure for Capital Budgets

   4. Reporting Forms

BUDGETING

A. Summary

The Prospective Incentive Payment Experiment proposes to prospectively determine rates, where rates are a function of costs. Recognized Expenses and Capital Costs define costs (see Section D in text). The Multiple Rate System (MRS) defines a unit or cost center in which to allocate costs (see Section L in text and Appendix F). Accounting for Costs describes the procedure and method to be used in accumulating these costs into the cost center (see Section O in text and Appendix G). The objective of the Budgeting procedure section is to draw together these concepts for an accurate projection of costs, volume of activity and cost per unit (as explained elsewhere, the unit of cost need not be the unit of payment). To derive costs, volume, and cost per unit, departmental volume statistics are proposed as the budgeting foundation. Concentrating on operating budgets for review purposes, a detailed step-by-step procedure for completing an operating budget is proposed. The sophisticated statistical accumulation needed for the Multiple Rate System, along with California Health Facilities Commission Disclosure data as restated in the proposed cost accounting system, are the data requirements.

The projected operating budget is a flexible budget stated for a predicted volume of activity. The budget is stated in total costs, MRS center costs and per unit costs. The procedures and methods follow traditional steps and are only modified to

be compatible with the Prospective Incentive Payment Experiment and Disclosure data.

B. Introduction

This section attempts to consolidate the total financial requirements of hospitals into a projection or budget. A budget is simply a quantified expression of a plan of action and as such is essential to the effective operation of the hospital. Budgets may be formulated for the total hospital (a master budget) or for any subunit activity. A master budget would summarize the operating objectives of all subunits within the hospital complex. The budgeting procedure explicitly quantifies expectations regarding future income, cash flows, financial status and supporting plans. The master budget provides a practical approximation of an operational model of the total hospital, its objectives, its inputs and its outputs.

The Prospective Incentive Payment Experiment (PIPE) is directed toward external review of budgets; therefore, efforts were primarily directed to provision of a uniform accounting, budgeting and reporting system which would enable effective and equitable evaluation of budget proposals. The California Hospital Association Budgeting Manual provides the framework and methodology for performing in-house budgeting. Thus, while the main objective has not been to dictate hospital management techniques, efforts have been made to provide a budgeting method that assists hospitals in managing as well. The conceptual framework of the Budgeting Manual is summarized below.

(1) Prerequisites to a Successful Budgeting Process

- A commitment to long-range planning and management of the hospital's operations.
- Well-defined goals and objectives.
- An effective organizational structure.
- A responsible accounting system with functional and natural classification visibility.
- The accumulation of adequate statistical data.
- A formal reporting system.

(2) Goals and Objectives to be Achieved Through the Budgeting Process

- Provide a financial expression of the policies and plans of the institution.
- Identify the allocation of resources required by the plan.
- Provide a basis for the measurement of an evaluation of overall and departmental, as well as program financial performance, in accordance with plans.
- Provide regular periodic reports which would serve as useful tools for the management of resources and operations, and assessing fiscal viability of the institution.
- Create cost awareness throughout the organization.
- Assist management in program and rate evaluation and determination.

(3) Functions and Responsibilities

- Establishment of overall operational goals and policies for the institution.

- Translation of these goals into management objectives for the various organizational units.
- Development of a formal system of budget preparation and review incorporated into a manual that provides recommended forms and methods for each step in the process.
- Provision of historical, statistical, and financial data to the individuals preparing the budgets.
- Actual departmental preparation of the budgets, followed by the preparation of the master budget.
- Testing of the financial feasibility of the master budget and demonstrating the results of other patient load possibilities and financial alternatives.
- Approval of the final document, with final notification going back down the line of command.
- Periodic performance reporting by responsibility center of "earned" budget and actual expenses incurred, progress toward objectives and capital asset acquisition.

C. Components of a Budget Program

A comprehensive budgeting program for a hospital could be composed of:

(1) Operating Budget;

(2) Cash Budget;

(3) Capital Expenditures Budget;

(4) Detailed Variance Analysis.

1. Operating Budget

The budgeting process represents the culmination of many other managerial and operational activities. Operating Budgets

are intended to explicitly state operating revenue and expense expectations for the coming period. Flexible budgets are often used because of their capability of examining variable levels of activity. The main virtue of the flexible budget is that it permits budgeting for a range of activity and allows performance comparisons (e.g., costs, efficiency) between different levels of output and among different facilities. The contribution approach income statement presented in Appendix G, "Accounting for Costs," in many ways is the foundation of the Operating Budget since it distinguishes between fixed and variable expenses. When budgeting, the hospital is concerned with achieving the same objective as with cost accounting: providing high quality patient care at a reasonable cost.

Through the cost accounting procedures already outlined, the hospital should be capable of determining at least approximations of its cost behavior (relation of expenses per unit to volume). Understanding of hospital cost behavior will permit the separation of expenses into fixed and variable as outlined in Appendix G, "Accounting for Costs." By projecting the volume of activity for each of the Multiple Rate System (MRS) service categories, the total hospital volume and mix of services can be projected. Using the cost behavior patterns estimated from historical data, with the appropriate adjustments for factor price changes, will provide the new price per unit of service in each of the MRS clusters.

Merging the price and volume data will provide an operating budget for the projected volume for each service and a

consolidated budget for the hospital. This cost and volume information provides the basis for a dynamic model of hospital operations capable of predicting the financial impact of changes in prices and quantities of inputs and outputs.

2. Cash Budget

The cash budget, like the operating budget, covers the next fiscal period and the operations of the hospital. The difference is that the cash budget actually examines the cash inflow and outflow. For example, depreciation is a recognized expense and is included in the operating budget. Since depreciation is not an actual cash outflow it would not be included in a cash budget. A principal payment on a loan would not be included in the financial operating budget, but would be included in the cash budget.

Another example is the timing difference between when a hospital must meet payrolls and other payables and when payment for these services is received at some later date.

The timing mismatch of payment for inputs and revenue receipt is the classic cash flow problem. These two examples and others distinguish the cash budget from the operating budget. Because the timing difference is crucial, the cash budget is for each month of the coming fiscal period. When projected outflows for a given month exceed inflows, the hospital must somehow meet the deficit or default to its creditors. The cash for payment can either come from cash reserves set aside when inflows exceeded outflows, or by borrowing from a financial institution. Negative cash flows are quite common and should be considered of short-term duration only. Interest on money borrowed to

balance the cash flow position should be accumulated in the interest on working capital accounts of the operating budget.

The working capital needs as expressed in the cash budget must be incorporated into the operating budget for budget and rate review.

3. Capital Budget

The capital budget provides an extended picture of a hospital's sources and uses of funds for capital expenditures exceeding some predetermined level. At a minimum the capital budget should cover three years but preferably longer depending on the size of the expenditure. Hospitals should estimate the magnitude and scope of expenses to be included in the capital budget. Planning agencies will also set a minimum expenditure value to be detailed in the capital budget (the minimum expenditure value can be different from the hospital's predetermined level).

As with the cash budget, the current period cash requirements from the capital budget must be incorporated into the operating budget. Since the capital budget includes costs associated with assets that must be licensed and approved by planning agencies, the budget would have to be reviewed for compliance with the areawide health plan.

The capital budget represents the long-range planning horizon for the hospital and is an invaluable management tool. (Capital Budgets are discussed in detail in Section F below.)

4. Detailed Variance Analysis

The fourth component for the hospital and reviewing agency is a mechanism for detailed variance analysis. Variance analysis

is the process of comparing actual expenditures to budgeted expenditures. All variance analyses start with a computation of total variance. The total variance can be subdivided into two component variances: (1) price or rate; and (2) usage or efficiency. Variance analysis provides a structure for performance measurement and hospital comparison.

In summary, the minimum hospital budgeting program should contain:

(1) Operating Budget;

(2) Cash Budget;

(3) Capital Expenditures Budget;

(4) Detailed Variance Analysis.

D. Merging MRS With Budgeting and Cost Per Service Unit Analysis

1. Overview

The Multiple Rate System was designed to provide a statistical infrastructure for the cost accounting and budgeting systems (see Table 1). The model is structured to be keyed to statistical variables--units of service, patient days or visits--rather than dollar values. The reason for this is that dollar values are subject to numerous exogenous influences over time and across regions (e.g., inflation, local market conditions). Volume statistics, however, appear to be more a function of the health care environment (e.g., population, physicians, hospitals, insurance programs). By using the volume statistics, price and cost behavior patterns for different services, segregated between fixed and variable, can be derived. Merging the cost behavior

Table 1

MULTIPLE RATE SYSTEM (MRS) GROUPINGS

I.	Intensive Care
II.	Sub-acute Hospitalization
III.	Obstetrics
IV.	Acute Care: Psychiatric
V.	Acute Care: Pediatric
VI.	Acute Care: Medical
VII.	Acute Care: Surgical
VIII.	Acute Care: Nursery
IX.	Special High Technology, High Cost Equipment
X.	Clinic: Psychiatric
XI.	Clinic: Dental
XII.	Clinic: All Other
XIII.	Surgical Day Care
XIV.	Radiation Therapy
XV.	Emergency Room
XVI.	Educational Programs

data with projected values of volume statistics will provide the operating budget for a functional service center. Aggregating the various service centers will then provide a Master Operating Budget for the total hospital.

Forecasting volume changes is obviously a complex task. Numerous forecasting techniques exist, but no one method has distinguished itself as superior to all others. Similarly, changes in input prices, inflation and technological changes are difficult to predict. Section B.3 in the text, "Hospital Input Prospective Price Index," provides a possible method for inflation measurement.

A complete budget would be submitted for review. It would include total financial requirements, recognized expenses and capital costs, and would use the MRS cost accounting method. Section B.4 in the text, "Screening Process," details the procedure used to screen budgets and rates. This budget is the key component of the system and the foundation for prospectively determined rates.

In addition to the budget screen, certain other aspects of a hospital's performance can be examined. Expenses and output statistics can be compared over time and across institutions. Target occupancy levels can be simulated and examined for financial implications.

A budget and rate review system without coordination with other regulatory processes will not maximize its cost containment potential. It is essential that the rate and budget review agency work in conjunction with planning agencies.

Limitations of budgeting must be recognized. Four problem areas that often develop with budgeting are:

(1) over detailed budgeting is dangerous--missing the forest for the trees;

(2) budgeting goals may supersede hospital and community goals;

(3) budgets can tend to hide inefficiencies by continuing initial expenditures in the succeeding period without proper evaluation;

(4) case study evidence suggests that the use of budgets as a pressure device often defeats basic budgeting objectives.

For these reasons and others, budget and rate review must be part of a larger regulatory mechanism.

2. Variance from Budget

The key statistic in flexible budgeting is the projected volume of activity statistic. Strong financial incentives may tempt hospitals to project the lowest possible volume of activity. Guidelines must be built into the review procedure clearly enumerating permissible occupancy targets. Since volume fluctuation can have a considerable impact on per unit expense, some mechanism to cope with significant volume variances is essential. Extenuating economic circumstances--medical staff strikes, natural catastrophies, and so on--can significantly alter a hospital's volume projections. Criteria must be established that deal with the economic consequences of a significant volume variance. (See Section C, "Adjustments to the Rate Review Process," in the text.)

In the second and subsequent years of the system, budget variances (differences between actual and budgeted) can be analyzed. Budget variance is often divided into two areas: volume and spending. A Volume Variance deals with variance in the magnitude of the output or input of specified units between budgeted and actual. Spending Variance examines the variance from budgeted cost per specified unit and actual cost per specified unit. Both of these variances should be singled out in any variance analysis.

3. Procedure for Determining Budget Using MRS Accounting Base

3.1 Summary

The budgeting procedure can be summarized into six major steps:

(1) determine historical recognized expenses per unit of service;

(2) project the number of units of service required during the coming year;

(3) separate the fixed from the variable components of the historical recognized expenses per unit of service and perform the appropriate price and quantity adjustments;

(4) use the projected and adjusted fixed and variable recognized expenses per unit of service to project the total recognized expenses per unit of service;

(5) add the projected return on assets per unit of service to the recognized expenses to arrive at the total financial requirements per unit of service (see Section D in text);

(6) multiply the projected total units of service by total financial requirements per unit of service to determine the total financial requirements for the hospital to operate at the projected volume in units of service.

The above brief summary is a conceptual outline of the budgeting process. The relationship between expenses and volume is paramount to the budgeting function. Projecting the operating expense for a hospital, however, is an extremely complex and difficult task. The complete budgeting program as detailed elsewhere is composed of several components. Preparation of the pro forma statistical and financial statements for analytical purposes should follow the procedure detailed below. The detailed procedure translates the six broad steps into a workable methodology using the CHFC cost data and a supplemental detailed statistical breakdown.

3.2 Service Costing Procedure (Historical Expense) (Data Required: Pages 19 and 20, CHFC Forms)

(1) For the allocation of unassigned expenses to daily hospital services, ancillary services, research and education, use the step-down procedure as outlined in the California Hospital Accounting Manual (CHAM) for Lines 1-48, Page 20 of the California Health Facilities Commission (CHFC) Disclosure forms.

(2) Expense account categories not recognized as meeting the financial requirements for providing patient care should be removed (see "Recognized Expenses," Section D.1 in the text). This will be accomplished by following the step-down procedure until a nonrecognized account

is reached. The adjusted direct cost plus all expenses to this point allocated to specified account by the step-down process should be totaled, separated out, and not allocated to the remaining expense accounts.

(3) Research Expenses should be totaled and separated out.

(4) Education Expenses should be totaled and separated out.

(5) Net Educational Expenses with revenues (Lines 52-58, CHFC 20 with Line 76, CHFC 20).

(6) Net Research Expenses with revenues (Lines 49, 50, 51 CHFC 20 with Line 76, CHFC 20).

(7) Remove Cost Recoveries according to recognized revenue criteria outlined in "Recognized Expenses" (Section D.1 of text).

(8) Allocate remaining cost recoveries according to CHAM.

At this stage of the procedure all of the unassigned expenses as defined in CHAM have been allocated to Daily Hospital Services and Ancillary Hospital Services (Lines 78-127, CHFC 20). The next step-down procedure requires the allocation of most ancillary services (Lines 97-127, CHFC 20) to the proper MRS center (see Table 1, Page 9).

3.3 Allocation of Ancillary Services to MRS Center (Data Required: Pages 4, 19, 20, CHFC Forms; PIPE B--PIPE forms are included in this Appendix, Pages 23-24)

(1) Determine historical expense per unit of service for each ancillary service to be allocated (to the third decimal, 1/1000 of a dollar). This can be done by dividing Column 23 (CHFC 20) by the appropriate volume statistic

from CHFC 4 and/or PIPE B. The California Hospital Accounting Manual provides definitions for units of service.

(2) The proportion of expenses allocated to a specific MRS service center will be equivalent to the proportion of units of service consumed in the MRS center. This is equal to multiplying the per unit of service cost times the number of units consumed in the MRS center. This method is to be followed until all ancillary services' expenses are allocated to the MRS service costing centers.

(3) In cases where the allocation of total actual relative value units to an MRS center cannot be determined from hospital statistical data, random samples of patient records can be used to allocate the ancillary expenses.

3.4 Preparation of Historical Income/Expense Statement

(1) For each MRS service center a historical income statement as illustrated in "Accounting for Costs" (Appendix G) should be prepared.

(2) Columns 1-10 of PIPE Form D can now be completed using the above data and the previous year's budget.

3.5 Projecting Units of Service

The budgeting process proposed is based on the volume of output for the hospital as a whole and the service centers individually. It is for this reason, budgeting according to output, that the Multiple Rate System was proposed. Rather than project the output in relative value units of each hospital department and ancillary service, the volume in patient days, visits or other applicable service unit is projected for the

various MRS levels. Through the unit allocation system (PIPE B) an approximation is provided of the total number of ancillary units of service required to produce one unit of service in a service center. It is assumed the proportionate relationship holds for the budget year. The first step is to project the total units of service for each licensed service for the coming year. Second, the service demand projections are translated into MRS units of service for each MRS group. Third, using the historical ancillary component mix for each MRS group, the total of ancillary services required to support the projected patient load are extrapolated. At this stage a pro forma PIPE Form B can be completed as a projection of required ancillary services for the budget year.

(1) Projections using approved forecasting methods of unit volume (patient days) by service cluster will be made.

(2) Using historical volume mix data, total units of ancillary service required for the projected service volume will be extrapolated.

3.6 Projection of Cost Per Unit of Service

The projections of total and unit expenses are more complex and subjective than volume projections. Following the guidelines on fixed and variable expenses (presented in Appendix G), the historical fixed expenses from Pages 17 and 18 of the Disclosure forms must be adjusted for the coming year. Adjustments will be made for inflation, changes in licensed services, new facilities, and so on. The projected fixed expenses will be entered onto pro forma Pages 17 and 18. Second, the variable expenses per unit will be adjusted as indicated above. Projected volume

times adjusted variable per unit cost will equal the total variable cost. The variable costs will be entered in the appropriate rows and columns of Pages 17 and 18. Third, the costs on the pro forma 17 and 18 will be entered into a pro forma, Page 20. The step-down and allocation procedure in 3.2 and 3.3 above will be used to arrive at the projected cost data. Columns 11, 12, 13 and 14 of PIPE Form D can then be filled in with appropriate data.

Using historical Income/Expense Statements for MRS centers, expenses will be separated into fixed and variable using a one-year time horizon. Projections and adjustments to total fixed and unit variable costs will be made separately. Adjustments will be made for the following factors that can influence unit prices:

(1) change in volume to reflect cost behavior and target occupancy levels;

(2) expansion or contraction of capital facilities and services;

(3) projected inflation;

(4) determination of Capital Costs per unit by dividing Standard Margin as derived, using established rate of return, by appropriate units of service.

Columns 1 and 2 of PIPE Form E for each rate center can now be completed. The inflation factor, although keyed in on pro forma CHFC, Pages 17 and 18, is summarized for convenience. Column 3 provides for adjustments to expenses. Specifically, adjustments for licensed and approved facilities' changes coming

on-line or closing, significant economic factors, and positive and negative variances from previous years are made here. Using the procedure for determining Capital Costs, Column 5 can be completed. Summing the proper rows will provide Column 6, which by definition equals the total financial requirements for the specific MRS service. PIPE Form A summarizes expense data from the appropriate individual forms.

The entire package of forms can be considered the Operating Budget Program.

3.7 Total Financial Requirements

(1) By multiplying the total units of service by cost per unit of service (the result of the adjustments above) and aggregating across service areas, by definition a Master Operating Budget will be put together which meets the total financial requirements of a hospital. This dollar value, of course, will be keyed to a specific volume projection.

3.8 Special Circumstances

(1) New Services

Normative guidelines with respect to occupancy levels, cost per unit of service, growth curve leading to economies and the learning curve leading to economies will have to be applied to all new licensed and approved services.

(2) Significant Economic Distortion

Significant economic distortion caused exogenously will be adjusted on an individual basis.

The data required to complete the procedure are listed on the following pages. Forms for submission of data not recoverable

from California Health Facilities Commission (CHFC) Disclosure forms are also included. Financial requirements and allocation methods have been discussed in Sections D and O in the text and Appendix G.

4. Data Requirements for Budget and Rate Review

Data submitted to the reviewing agency should include:

(1) PIPE Form B, Statistical Breakdown. This form provides the needed statistical basis for allocation of ancillary service expense to the appropriate rate areas. Two versions will be required. The first would be historical actuals and the second would be projections for the budget year.

(2) CHFC 7041 h-5 (4-75), Page 4: Statistical Recap.

(3) CHFC 7041 g-1 (4-75), Page 19: Cost Allocation--Statistical Basis.

(4) CHFC 7041 f-1 (4-75), Page 20: Cost Allocation.

(5) CHFC 7041 h-6 (4-75), Page 21a: Detail of Direct Payroll Costs, Patient Revenue Producing Centers.

(6) CHFC 7041 h-7 (4-75), Page 22a: Detail of Direct Payroll Costs, Nonrevenue Producing Centers.

(7) CHFC 7041 d-8 (4-75), Page 17: Trial Balance Worksheet and Supplemental Expense Information, Revenue Producing Centers.

(8) CHFC 7041 d-9 (4-75), Page 18: Trial Balance Worksheet and Supplemental Expense Information, Nonrevenue Producing Centers.

(9) CHFC 7041 a-1 (4-75), Page 5: Balance Sheet--Unrestricted Fund.

(10) CHFC 7041 b-1 (4-75), Page 6: Balance Sheet--Restricted Funds.

(11) PIPE C: Computation of Average Equity Capital.

(12) PIPE A: Rate Formulation Summary Sheet.

(13) PIPE D: Expense Data by Rate Center.

(14) PIPE E: Rate Formulation by Rate Center.

PIPE FORM A

RATE FORMULATION
SUMMARY SHEET

Table 2.1

CODE	LEVEL	APPROVED & LICENSED SERVICES/ RATES	1 FULL COST	2 UNITS OF SERVICE 1974	3 COST UNIT 1974	4 FACTOR FOR INFLATION	5 ADJUSTMENTS	6 PROJECTED VOLUME [1]	7 FIXED EXP. UNIT 1975	8 VAR. EXP. UNIT 1975	9 SM UNIT 1975	10 RATE UNIT 1975
					1 ÷ 2=3							
A	1	Intensive Care										
A	2	ICU										
B		Sub-acute Hospital										
C	1	Obstetrics (Deliveries)										
C	2	OB (Abortions - Outpat)										
D	1	Psychiatric										
F	1	Pediatric (Med)										
F	2	Pediatric (Surg)										
G	1	Medical										
H	1	Surgical (Minor)										
H	2	Surgical (Major)										
I		Nursery										
J	1	High Technology										
J	3	Dialysis (Outpatient)										
K		Psychiatric Clinic										
L		Dental Clinic										
M		Other - Clinic										
N		Surgical Day Care										
O		Radiation Therapy										
P	1	Emergency Room										
P	2	Emergency Room										
E		Education Premium										

[1]Outline of projection method must be included

EXPLANATIONS TO PIPE FORM A

Column 1

Full Cost: Total of direct and indirect recognized and reasonable expenses including allocation of unassigned expenses.

Column 2

Units of Service: either patient day, a relative value unit, or visit depending on service.

NOTE: Relative value unit or relative expense unit will allow for sliding scale for per day expense. However, regardless of the unit used, further cost behavior research is necessary.

Column 3

Cost per unit: Column 1 divided by Column 2.

Column 4

Factor for Inflation: adjustment for inflation using hospital inflation index (see Section B.3 in the text).

Column 5

Adjustments: licensed and approved facilities that will come on-line in budget year should be timed into the budget. Other revenue and expense adjustments should also be made here. Number taken from Column 3, Row 12, Rate Formulation PIPE Form E.

Column 6

Projected Volume: anticipated and expected volume of service expressed in the appropriate units of service. Common forecasting methods, linear regression, curvi-linear regression, trend line and other can be used provided sufficient historical data exist. In addition, community demand can be more easily forecasted than demand facing the individual hospital. Cooperation in a service area could prove very valuable in year-to-year volume forecasts by determining total market projections.

Column 7 and 8

Fixed and variable expense taken from rate formulation, PIPE Form E, Column 4.

Column 9

SM/Unit: Standard Margin per unit as defined in text. Standard Margin allocated according to depreciation-allocation-statistic.

Column 10

Rate/Unit: Total financial requirements including a return on assets for budget year per unit of service. By definition, total

STATISTICAL BREAKDOWN

Table 2.2

PIPE FORM B

YEAR_____

ACTUAL ☐

PROJECTION ☐

CODE	LEVEL	SERVICE/RATE	LABOR AND DELIVERY	SURGERY AND RECOVERY	ANESTHESIOLOGY	CENTRAL SERV. AND SUPPLY	LABORATORIES CLINICAL	LABORATORIES PATHOLOGICAL	LABORATORIES PULMONARY FUNCTION	LABORATORIES OTHER	BLOOD BANK	ELECTRO-CARDIOLOGY	ELECTRO-MYOGRAPHY	ELECTROEN-CEPHALOGRAPHY	RADIOLOGY DIAGNOSTIC	NUCLEAR MEDICINE
A	1	ICU														
A	2	ICU														
A	3	ICU														
B		Sub-acute Hosp														
C	1	Obstetrics														
C	2	Obstetrics														
D	1	Psychiatric														
E	1	Pediatric														
F	2	Pediatric														
G		Medical														
H	1	Surgical														
H	2	Surgical														
H	3	Surgical														
I		Nursery														
J	1	High Technlgy														
J	2	High Technlgy														
J	3	High Technlgy														
K		Psych./Clinic														
L		Dental/Clinic														
M		Other/Clinic														
N		Surg. Day Care														
O		Rad. Therapy														
P	1	Emergency Rm														
P	2	Emergency Rm														
E		Education														
		Premium														

STATISTICAL BREAKDOWN
Table 2.2 (cont.)

YEAR_____

ACTUAL ☐

PROJECTION ☐

CODE	LEVEL	SERVICE/RATE	PHARMACY	INHALATION THERAPY	DIALYSIS	PHYSICAL THERAPY	OCCUPATIONAL THERAPY	OTHER PHYSICAL MEDICINE	HOME HEALTH SERVICES	OTHER ANCILLARY					
A	1	ICU													
A	2	ICU													
A	3	ICU													
B		Sub-acute Hosp													
C	1	Obstetrics													
C	2	Obstetrics													
D	1	Psychiatric													
F	1	Pediatric													
F	2	Pediatric													
G		Medical													
H	1	Surgical													
H	2	Surgical													
H	3	Surgical													
I		Nursery													
J	1	High Technlgy													
J	2	High Technlgy													
J	3	High Technlgy													
K		Psych./Clinic													
L		Dental/Clinic													
M		Other/Clinic													
N		Surg Day Care													
O		Rad. Therapy													
P	1	Emergency Rm													
P	2	Emergency Rm													
E		Education													
		Premium													

COMPUTATION OF AVERAGE EQUITY CAPITAL

Table 2.3

YEAR_____

ACTUAL ☐

PROJECTION ☐

	MONTH	EQUITY CAPITAL BEGINNING OF PERIOD	CAPITAL INVESTMENTS DURING PERIOD	GAIN (OR LOSS) SALE OF ASSETS	WITHDRAWALS OR DIVIDEND	OTHER INCREASES OR DECREASES	INCREASES OR DECREASES DUE TO OPERATIONS	EQUITY CAPITAL END OF MONTH NET TOTAL OF 1 - 6
		1	2	3	4	5	6	7
1	JANUARY							
2	FEBRUARY							
3	MARCH							
4	APRIL							
5	MAY							
6	JUNE							
7	JULY							
8	AUGUST							
9	SEPTEMBER							
10	OCTOBER							
11	NOVEMBER							
12	DECEMBER							
13								
14	TOTAL							

Line 14, Column 7 divided by 12 = Average Equity Capital.

EXPENSE DATA BY RATE CENTER

Table 2.4

	1974				1974						1975			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	BUDGET		COST UNIT	% OF TOTAL	ACTUAL		COST UNIT	% OF TOTAL	VARIANCE TOTAL	VARIANCE SPENDING		BUDGET	COST UNIT	% OF TOTAL
VARIABLE EXPENSES														
Wages & Salaries														
Supplies														
Variable Admin.														
Physician & Student Comp.														
Adjustment														
Purchased Serv.														
Prof. Fees														
External														
Internal														
UNASSIGNED EXP.														
Vol. Related Exp.														
Dietary														
Gen. Pat. Serv.														
Purchasing & Stores														
Housekeeping														
Laundry & Linen														
Central Serv. & Supplies														
Pharmacy														
FIXED EXPENSES														
General Admin.														
Nursing Admin.														
Plant Services														
Employee Serv.														
Interest-Other														
Interest- Working Capital														
Depreciation & Amort.														
Other														
TOTAL EXPENSE									VOLUME VARIANCE					
UNITS OF SERVICE														

RATE FORMULATION BY RATE CENTER

PIPE FORM E

YEAR _____

Table 2.5

	1	2	3	4	5	6
	BUDGET 1975	FACTOR FOR INFLATION	ADJUSTMENTS	1975 COST UNIT	SM	TOTAL FINANCIAL REQUIREMENTS
VARIABLE EXPENSES					XXXXXX	XXXXXX
PURCHASED SERVICES					XXXXXX	XXXXXX
UNASSIGNED EXPENSES					XXXXXX	XXXXXX
Volume Related					XXXXXX	XXXXXX
Fixed Exponses					XXXXXX	XXXXXX
TOTAL					1	1
Units of Service						

[1]PER UNIT

EXPLANATION TO PIPE FORM E

Column 3

Adjustments

Adjustments to expenses specifically for licensed and approved expansion coming on-line, significant economic factors, positive or negative variances from previous years as detailed in Section C in text.

E. Interim Budgeting Procedure

In order to review budgets and rates within the next two years, the budgeting procedure described above must be modified. Hospitals do not currently have the capability to allocate ancillary service costs and units of service to various rate codes as defined in the Multiple Rate System (MRS). Alternative methods of determining allocation statistics, such as patient bill analysis, would be too time-consuming and costly. Therefore, an interim procedure that would be easier to implement is required.

Since many hospitals currently do not have sophisticated budgeting techniques, the task of receiving budgets from all hospitals would be difficult even assuming total cooperation.

1. Modifications to the Budgeting Method

With respect to modifying the proposed budgeting method, procedures that call for the allocation of ancillary costs to the MRS codes would have to be omitted. Instead of preparing the income statements by MRS group, applicable departmental groups can be used. Described below are the step-by-step modifications required for immediate implementation. For convenience of reference, the section numbers used in Section 3 are repeated below:

(1) Summary (Section 3.1). No modification required.

(2) Service Costing Procedure (Historical Expense)--(Section 3.2). No modification required.

(3) Allocation of Ancillary Services to MRS Center (Section 3.3). This modification is suggested for development of a data base for future implementation.

Interim procedure will not rely on MRS allocations, however. Thus, for analytical and developmental purposes, the section is modified to read:

"The proportion of ancillary expenses allocated to a specific MRS service center will be equivalent to the ratio of charges in MRS center to total charges times total costs in the ancillary service department. This method is to be followed until all ancillary services' expenses are allocated to the MRS service costing centers.

"In cases where the allocation of total actual charges to an MRS center cannot be determined from hospital data, random samples of patient records or bills can be used to estimate percentages and can also be used as the basis to allocate the ancillary expenses."

(4) Preparation of Historical Income/Expense Statement (Section 3.4). Substitute departmental categories for MRS service centers.

(5) Projection of Units of Service (Section 3.5). Project units of service by department instead of MRS service category.

(6) Projection of Cost Per Unit of Service (Section 3.6). Use departmental units of service.

(7) Total Financial Requirements (Section 3.7). No modification required.

(8) Special Circumstances (Section 3.8). No modification required.

2. Data Requirements for Interim Budget and Rate Review

Data submitted to reviewing agency should include:

(1) PIPE Form B--Statistical Breakdown. During the interim budget and rate review period, this form is to be completed for analytical purposes only and will serve to establish a data base for future implementation of MRS. This form provides the needed statistical basis for the allocation of ancillary service expense to the appropriate rate areas.

(2) CHFC 7041 h-5 (4-75), Page 4: Statistical Recap.

(3) CHFC 7041 g-1 (4-75), Page 19: Cost Allocation: Statistical Basis.

(4) CHFC 7041 f-1 (4-75), Page 20: Cost Allocation.

(5) CHFC 7041 h-6 (4-75), Page 21a: Detail of Direct Payroll Costs, Patient Revenue Producing Centers.

(6) CHFC 7041 h-7 (4-75), Page 22a: Detail of Direct Payroll Costs, Nonrevenue Producing Centers.

(7) CHFC 7041 d-8 (4-75), Page 17: Trial Balance Worksheet and Supplemental Expense Information, Revenue Producing Centers.

(8) CHFC 7041 d-9 (4-75), Page 18: Trial Balance Worksheet and Supplemental Expense Information, Nonrevenue Producing Centers.

(9) CHFC 7041 a-1 (4-75), Page 5: Balance Sheet, Unrestricted Fund.

(10) CHFC 7041 b-1 (4-75), Page 6: Balance Sheet, Restricted Funds.

(11) PIPE C: Computation of Average Equity Capital.

(12) PIPE A-1: Rate Formulation Summary Sheet by Department.

(13) PIPE D-1: Expense Data by Department.

(14) PIPE E-1: Rate Formulation by Department.

RATE FORMULATION
SUMMARY SHEET

Table 3.1
BY DEPARTMENT, NOT MRS RATE CODE

	CODE	LEVEL	APPROVED & ALLOWED SERVICES/ RATES	1 FULL COST	2 UNITS OF SERVICE 1974	3 COST UNIT 1974	4 FACTOR FOR INFLATION	5 ADJUSTMENTS	6 PROJECTED VOLUME 1	7 FIXED EXP. UNIT 1975	8 VAR. EXP. UNIT 1975	9 SM UNIT 1975	10 RATE UNIT 1975
						1 ÷ 2=3							
1	A	1	Intensive Care										
2	A	2	ICU										
3	B		Sub-acute Hospital										
4	C	1	Obstetrics (Deliveries)										
5	C	2	OB (Abortions - Outpat)										
6	D	1	Psychiatric										
7	F	1	Pediatric (Med)										
8	F	2	Pediatric (Surg)										
9	G	1	Medical										
10	H	1	Surgical (Minor)										
11	H	2	Surgical (Major)										
12	I		Nursery										
13	J	1	High Technology										
14	J	3	Dialysis (Outpatient)										
15	K		Psychiatric Clinic										
16	L		Dental Clinic										
17	M		Other - Clinic										
18	N		Surgical Day Care										
19	O		Radiation Therapy										
20	P	1	Emergency Room										
21	P	2	Emergency Room										
22													
23	E		Education Premium										

[1]Outline of projection method must be included.

STATISTICAL BREAKDOWN

Table 3.2

(FOR ANALYTICAL PURPOSES ONLY)*

PIPE FORM B

YEAR_____

ACTUAL ☐

PROJECTION ☐

CODE	LEVEL	SERVICE/RATE	LABOR AND DELIVERY	SURGERY AND RECOVERY	ANESTHESIOLOGY	CENTRAL SERV. AND SUPPLY	LABORATORIES CLINICAL	LABORATORIES PATHOLOGICAL	LABORATORIES PULMONARY FUNCTION	LABORATORIES OTHER	BLOOD BANK	ELECTRO-CARDIOLOGY	ELECTRO-NYOGRAPHY	ELECTROEN-CEPHALOGRAPHY	RADIOLOGY DIAGNOSTIC	NUCLEAR MEDICINE
A	1	ICU														
A	2	ICU														
A	3	ICU														
B		Sub-acute Hosp														
C	1	Obstetrics														
C	2	Obstetrics														
D	1	Psychiatric														
F	1	Pediatric														
F	2	Pediatric														
G		Medical														
H	1	Surgical														
H	2	Surgical														
H	3	Surgical														
I		Nursery														
J	1	High Technlgy														
J	2	High Technlgy														
J	3	High Technlgy														
K		Psych./Clinic														
L		Dental/Clinic														
M		Other/Clinic														
O		Surg. Day Care														
P	1	Rad. Therapy														
P	2	Emergency Rm														
E		Emergency Rm														
		Education														
		Premium														

* During the interim budget and rate review period this form will be used for analytical purposes, and to develop a data base for future MRS implementation.

STATISTICAL BREAKDOWN
Table 3.2 (cont.)

PIPE FORM B

YEAR_____

ACTUAL ☐

PROJECTION ☐

(FOR ANALYTICAL PURPOSES ONLY)

CODE	LEVEL	SERVICE/RATE	PHARMACY	INHALATION THERAPY	DIALYSIS	PHYSICAL THERAPY	OCCUPATIONAL THERAPY	OTHER PHYSICAL MEDICINE	HOME HEALTH SERVICES	OTHER ANCILLARY					
A	1	ICU													
A	2	ICU													
A	3	ICU													
B		Sub-acute Hosp													
C	1	Obstetrics													
C	2	Obstetrics													
D	1	Psychiatric													
F	1	Pediatric													
F	2	Pediatric													
G		Medical													
H	1	Surgical													
H	2	Surgical													
H	3	Surgical													
I		Nursery													
J	1	High Technlgy													
J	2	High Technlgy													
J	3	High Technlgy													
K		Psych./Clinic													
L		Dental/Clinic													
M		Other/Clinic													
N		Surg Day Care													
O		Rad. Therapy													
P	1	Emergency Rm													
P	2	Emergency Rm													
E		Education Premium													

PIPE FORM C

COMPUTATION OF AVERAGE EQUITY CAPITAL

Table 3.3

YEAR_____

ACTUAL ☐

PROJECTION ☐

	MONTH	EQUITY CAPITAL BEGINNING OF PERIOD	CAPITAL INVESTMENTS DURING PERIOD	GAIN (OR LOSS) SALE OF ASSETS	WITHDRAWALS OR DIVIDEND	OTHER INCREASES OR DECREASES	INCREASES OR DECREASES DUE TO OPERATIONS	EQUITY CAPITAL END OF MONTH NET TOTAL OF 1 - 6
		1	2	3	4	5	6	7
1	JANUARY							
2	FEBRUARY							
3	MARCH							
4	APRIL							
5	MAY							
6	JUNE							
7	JULY							
8	AUGUST							
9	SEPTEMBER							
10	OCTOBER							
11	NOVEMBER							
12	DECEMBER							
13								
14	TOTAL							

Line 14, Column 7 divided by 12 = Average Equity Capital.

EXPENSE DATA BY DEPARTMENT

PIPE FORM D -1

Table 3.4

BY DEPARTMENT, NOT MRS RATE CODE

	1974				1974						1975			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	BUDGET		COST UNIT	% OF TOTAL	ACTUAL		COST UNIT	% OF TOTAL	VARIANCE TOTAL	VARIANCE SPENDING		BUDGET	COST UNIT	% OF TOTAL
VARIABLE EXPENSES														
Wages & Salaries														
Supplies														
Variable Admin.														
Physician & Student Comp.														
Adjustment														
Purchased Serv.														
Prof. Fees														
External														
Internal														
UNASSIGNED EXP.														
Vol. Related Exp.														
Dietary														
Gen. Pat. Serv.														
Purchasing & Stores														
Housekeeping														
Laundry & Linen														
Central Serv. & Supplies														
Pharmacy														
FIXED EXPENSES														
General Admin.														
Nursing Admin.														
Plant Services														
Employee Serv.														
Interest-Other														
Interest- Working Capital														
Depreciation & Amort.														
Other														
TOTAL EXPENSE									VOLUME VARIANCE					
UNITS OF SERVICE														

RATE FORMULATION BY RATE CENTER

PIPE FORM E -1

YEAR _____

Table 3.5

BY DEPARTMENT, NOT MRS RATE CODE

	1	2	3	4	5	6
	BUDGET 1975	FACTOR FOR INFLATION	ADJUSTMENTS	1975 COST UNIT	CAPITAL COSTS	TOTAL FINANCIAL REQUIREMENTS
VARIABLE EXPENSES						
PURCHASED SERVICES						
UNASSIGNED EXPENSES						
Volume Related						
Fixed Expenses						
TOTAL						
Units of Service					1	1

[1]PER UNIT

F. Capital Expenditures Budget

The capital expenditures budget presents the sources and uses of funds for expansion, acquisitions and renovations. It is a plan detailing the time relationship of inflows and outflows of funds for the separate projects. A three-year capital budget detailing the uses of the standard margin will be required in the budget review process. Longer periods of seven or eight years, however, would be advisable for complex and costly projects. Reporting of expenditures with lower capitalization values would permit greater control over asset acquisitions, but the additional cost of preparation and review could neutralize the benefits.

Review and approval of capital budgets demands a sophisticated understanding of community needs and of resources available to satisfy these needs. Approval of a capital expenditure program will require both compliance with an explicitly established community health plan and financial feasibility of the expenditure. Because of the predictive nature of the capital budget, especially a seven-year budget, it cannot be considered totally accurate and binding on an institution. A hospital cannot be expected to adhere completely to a capital budget plan because economic, social and political changes during the interim period could alter optimum strategies.

The Budgeting Manual of the California Hospital Association[1] outlines a capital budgeting procedure. Possible uniform formats adapted from the Manual to serve rate review agency purposes are included at the end of this section. To be most effective capital budgets should be uniform and for the same fiscal periods for all institutions within a Health Service Area (HSA).

1. Function of Capital Budget Review

The following are functions of capital budget review:

(1) match community needs with proposed capital expenditures;

(2) act as a brake on the duplication of facilities and equipment unless required by community plan; and

(3) monitor the cost of approved capital expenditure projects.

2. Types of Expenditures Detailed in Capital Budgets

All expenditures for assets with capitalized values above the prescribed minimum should include, but not be restricted to, the following types of expenditures:

(1) new equipment and technology;

(2) replacement;

(3) renovation;

(4) expansion of current assets; and

(5) changing from existing service to new service.

3. Screening Procedure for Capital Budgets

(1) All capital budgets for a specific planning area are to be submitted at the same time.

---

[1]California Hospital Association and Hospital Financial Management Association, Budgeting Manual, Sacramento: California Hospital Association, 1974.

(2) Expenditures are to be categorized as follows:

(a) replacement;

(b) expansion of current assets;

(c) assets to support new services;

(d) new technology and equipment,

(e) other.

(3) Services that are to be discontinued should be noted along with itemization of financial and community implications of the discontinuance of a service.

(4) Expenditures must be in compliance with the community plan.

(5) Renovation and replacement are subject to a simple screen on reasonableness of expenditure.

(6) New technology and services would be subjected to a more detailed screen on appropriateness of expenditure.

(7) In cases where different institutions are planning for the same expansion, selection criteria based on net present value calculations must be established.

This is a gross description of the screening procedure. The actual method should be consistent with the procedures outlined in Section B.4 in the text (Screening Procedures).

4. Reporting Forms (PIPE Forms X, Y, and Z)

The following forms are presented as possible formats for reporting of capital expenditures. In large part they are drawn from the Budgeting Manual of the California Hospital Association. The form, detail and content of the Capital Budget depends on its objective and anticipated uses.

(1) Form X--Total Capital Budget

This form aggregates the total sources and use of funds by source and use categories.

(2) Form Y - Projects Summary

This form provides a summary of expenses and characteristics by project or acquisition.

(3) Form Z - Project Detail

This form provides the detail of sources and uses for each project or acquisition within the capitalization guides. All "Miscellaneous" capital expenditures should be included on one separate page. Form X and Y are completed from information contained on these forms.

(4) Not yet designed is a form to illustrate the impact of the discontinuance of a licensed service.

TOTAL CAPITAL BUDGET

PIPE FORM X

SUMMARY SHEET

Table 4.1

	YEAR 1	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	
USES OF FUNDS												
Purchase of Assets												
Expansion Fund												
Interest Payment												
Principal Payment												
Allocated General Administration												
Allocated General Service												
Supplies												
Salaries and Wages												
Other Allocated Expenses												
Lease Payments												
Total Uses												
SOURCES OF FUNDS												
Revenue From Current Operations												
Loans and Mortgages												
Retained Earnings												
Fund Balances												
Depreciation												
New Equity Investment												
Fund Raising												
Expansion Fund												
Interest Income												
Disposal of Assets												
Total Source												
Net Inflow (Outflow)												

Projects Summary Sheet

Table 4.2

Item	Page	Project or Aquisition	Code	New Service	Addition	Replacement Priority*	Disposal**	Quantity	Misc.	Expenses in Year (Salvage) 1975	1976	1977	1978	1979	1980	1981	Total	Remarks Planning Agency
		TOTAL																

* Priority
A. Required for Continued Licensure or Certification
B. Required for Expansion of Service
C. Other

**Disposal
E. Trade-In
F. Sale
G. Retire and Store
D. Donation
J. Junk

Codes

1. New Service Requires License
2. Change in Service License
3. New Service no License Required
4. Removal of Licensed Service
5. Removal of Nonlicensed Service
6. Replacement: Licensed

PROJECT DETAIL

ITEM: #_____

PROJECT OR ACQUISITION:
TOTAL EXPECTED LIFE:
DISCOUNT RATE:

Table 4.3

PAGE: _____

Project or Aquisition	YEAR 1	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7
USES OF FUNDS											
Purchases of Assets											
Interest Payment											
Principal Payment											
Allocated Gen. Admin.											
Allocated Gen. Serv.											
Supplies											
Salaries & Wages											
Other Allocated Exp.											
Lease Payments											
Start-up Expense											
Total Uses											
SOURCES OF FUNDS											
Rev. from Current Oper.											
Loans & Mortgages											
Retained Earnings											
Fund Balances											
Depreciation											
New Equity Inv.											
Fund Raising											
Expansion Fund											
Interest Income											
Total Sources											
NET INFLOW (OUTFLOW)											
PRESENT VALUE FACTORS											
NET PRESENT VALUE OF FLOW											
NET PRESENT VALUE: PROJECT											

PIPE FORM X-1

TOTAL CAPITAL BUDGET

SUMMARY SHEET

Table 4.4

	YEAR 1	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	
USES OF FUNDS												
Purchase of Assets												
Expansion Fund												
Interest Payment												
Principal Payment												
Lease Payments												
Start-up Expenses												
Total Uses												
SOURCES OF FUNDS												
Loans & Mortgages												
Retained Earnings												
Depreciation & Amortization												
Net Equity Investment												
Fund Raising												
Standard Margin												
Expansion Fund												
Interest Income												
Disposal of Assets												
Total Source												
Net Inflow (Outflow)												

PROJECTS SUMMARY SHEET

Table 4.5

Item	Page	Project or Aquisition	Code	New Service	Addition	Replacement Priority*	Disposal**	Quantity	Misc.	Expenses in Year (Salvage) 1975	1976	1977	1978	1979	1980	1981	Total	Remarks Planning Agency
		TOTAL																

* Priority
A. Required for Continued Licensure or Certification
B. Required for Expansion of Service
C. Other

**Disposal
E. Trade-In
F. Sale
G. Retire and Store
D. Donation
J. Junk

Codes

1. New Service Requires License
2. Change in Service License
3. New Service no License Required
4. Removal of Licensed Service
5. Removal of Nonlicensed Service
6. Replacement: Licensed

PROJECT DETAIL

ITEM: #_____

PAGE: _____

PROJECT OR ACQUISITION:
TOTAL EXPECTED LIFE:
DISCOUNT RATE:

Table 4.6

Project or Aquisition	YEAR 1	1ST QTR.	2ND QTR.	3RD QTR.	4TH QTR.	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7
USES OF FUNDS											
Purchases of Assets											
Interest Payment											
Principal Payment											
Lease Payments											
Start-up Expense											
Total Uses											
SOURCES OF FUNDS											
Loans & Mortgages											
Retained Earnings											
Depreciation											
New Equity Inv.											
Fund Raising											
Disposal of Assets											
Expansion Fund											
Interest Income											
Standard Margin											
Total Sources											
NET INFLOW (OUTFLOW)											
PRESENT VALUE FACTORS											
NET PRESENT VALUE OF FLOW											
NET PRESENT VALUE: PROJECT											

HIGHSMITH 45-220

DATE DUE

CONTRACT RESEARCH SERIES

Number	
1	Integration of Information for Hospital Rate Setting
2	Prospective Rate Setting Information System Design
3	Prospective Incentive Payment Experiment: Phase 1

RA 971.3 .H25 no. 3 Appen.

California Hospital
Association.

Prospective incentive
payment experiment :

CMS LIBRARY
3 8095 00015233 6